CFD-Z500/Z501/Z550

SERVICE MANUAL

Ver. 1.1 2005.09

US Model
CFD-Z500/Z501/Z550

Canadian Model
CFD-Z500/Z550

Photo : CFD-Z550

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US Model)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
With 3.2-ohm loads, both channels driven from 150 - 10,000 Hz; rated 1.8 W per channel-minimum RMS power, with no more than 10% total harmonic distortion in AC operation.

CD Section	Model Name Using Similar Mechanism	CFD-ZW750/ZW770
	CD Mechanism Type	KSM-213CDM
	Optical Pick-up Name	KSS-213C
TC Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	MF-Z500-117

Other Specifications

CD player section
System
Compact disc digital audio system
Laser diode properties
Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output: Less than 44.6 µW
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
2
Frequency response
20 - 20,000 Hz +1/–2 dB
Wow and flutter
Below measurable limit

Radio section
Frequency range
FM: 87.6 - 108 MHz
AM: 530 - 1,710 kHz
Antennas
FM: Telescopic antenna
AM: Built-in ferrite bar antenna

Cassette-corder section
Recording system
4-track 2 channel stereo
Fast winding time
Approx. 120 s (sec.) with Sony cassette C-60
Frequency response
TYPE I (normal): 80 - 12,500 Hz

General
Speaker
Full range: 10 cm (4 in.) dia., 3.2 ohms, cone type (2)
Outputs
Headphones jack (stereo minijack)
For 16 - 68 ohms impedance headphones
Power output (excluding US model)
2.3 W + 2.3 W (at 3.2 ohm, 10% harmonic distortion in AC operation)

– Continued on next page –

CD RADIO CASSETTE-CORDER

9-874-157-02
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Sony Corporation
Personal Audio Group
Published by Sony Engineering Corporation

SONY®

Power requirements
For CD radio cassette-corder:
120 V AC, 60 Hz
9 V DC, 6 size D (R20) batteries
For memory back-up:
4.5 V DC, 3 size AA (R6) batteries
For remote controller (CFD-Z550 only):
3 V DC, 2 size AA (R6) batteries

Power consumption
AC 15 W

Battery life
For CD radio cassette-corder:

FM recording	
Sony R20P:	approx. 13.5 h
Sony alkaline LR20:	approx. 20 h
Tape playback	
Sony R20P:	approx. 7.5 h
Sony alkaline LR20:	approx. 15 h
CD playback	
Sony R20P:	approx. 2.5 h
Sony alkaline LR20:	approx. 7 h

For memory back-up: approx. 1 year

Dimensions
Approx. 650 × 265 × 250 mm (w/h/d)
(25 5/8 × 10 1/2 × 9 7/8 inches) (incl. projecting parts)

Mass
Approx. 7.15 kg (15 lb. 12 oz.) (incl. batteries)

Supplied accessory
AC power cord (1)
Remote controller (1) (RMT-CZ550A)
(CFD-Z550 only)

Design and specifications are subject to change without notice.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SERVICING NOTES

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

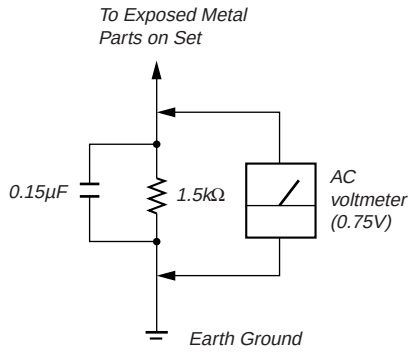
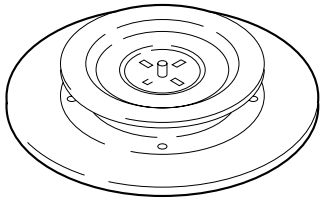


Fig. A. Using an AC voltmeter to check AC leakage.

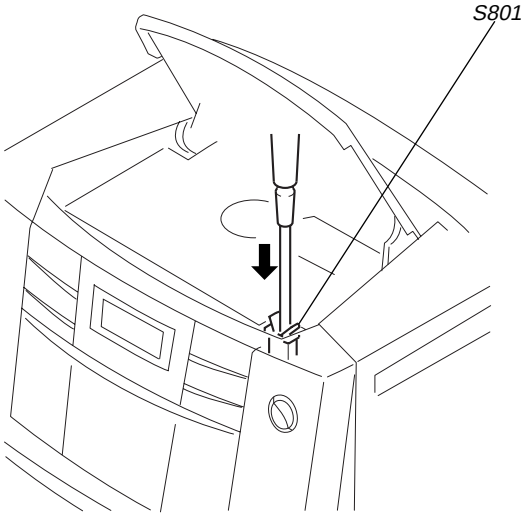
CHUCK PLATE JIG ON REPAIRING

On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.
• Code number of Chuck Plate Jig: X-4918-255-1



LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Turn on POWER button and press CD button to CD position.
2. Open the CD lid.
3. Turn on S801 as following figure.
4. Press the ►❚❚ (CD) button.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
   Objective lens moves up and down three times for focus search.



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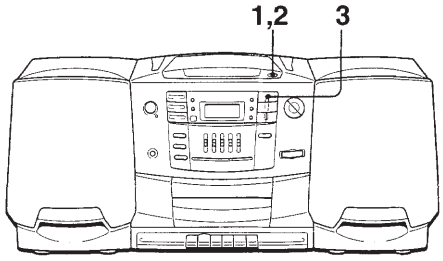
SECTION 1
GENERAL

This section is extracted from instruction manual.

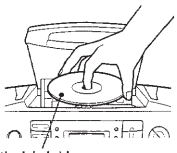
Playing a CD



For hookup instructions, see pages 23 – 25.

1

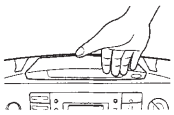
Push ⏏ PUSH OPEN/CLOSE down to open the CD compartment and place the CD on the CD compartment.



With the label side up

2

Close the lid of the CD compartment.

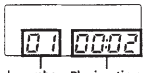


3

Press ►II.

The player turns on (direct power-on) and plays all the tracks once.

Display

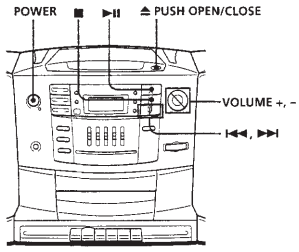


Track number Playing time

Tip

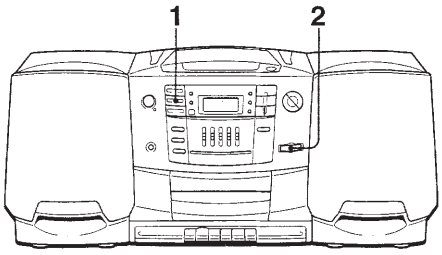
Next time you want to listen to a CD, just press ►II. The player turns on automatically and starts playing the CD.

Use these buttons for additional operations



To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote, CFD-Z550 only)
stop playback	■
pause playback	►II (II on the remote, CFD-Z550 only). Press the button again to resume play after pause.
go to the next track	►►I
go back to the previous track	I◄◄
remove the CD	⏏ PUSH OPEN/CLOSE
turn on/off the player	POWER

Listening to the radio

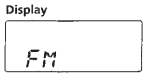


For hookup instructions, see pages 23 – 25.

1

Press RADIO BAND (BAND on the remote, CFD-Z550 only) until the band you want appears in the display (direct power-on).

Display



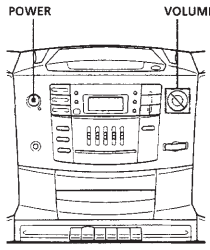
2

Turn TUNING to tune in the station you want.
If the received FM stereo is weak, the reception becomes monaural.

Tip

Next time you want to listen to the radio, just press RADIO BAND (BAND on the remote, CFD-Z550 only). The player turns on automatically and starts playing the previous station.

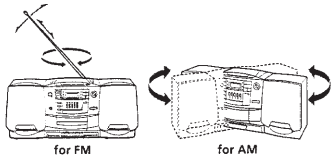
Use these buttons for additional operations



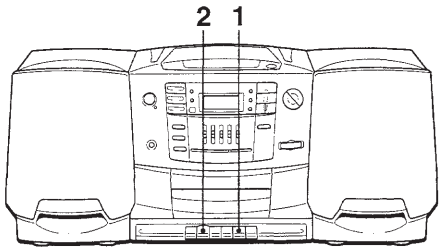
To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote, CFD-Z550 only)
turn on/off the radio	POWER

To improve broadcast reception

Reorient the antenna for FM. Reorient the player itself for AM.



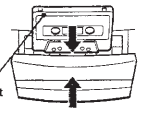
Playing a tape



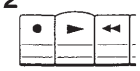
For hookup instructions, see pages 23 – 25.

1

Press ■⏏ to open the tape compartment and insert a recorded tape. Use TYPE I (normal) tape only. Close the compartment.



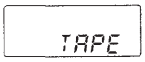
2



Press ►.

The player turns on (direct power-on) and starts playing.

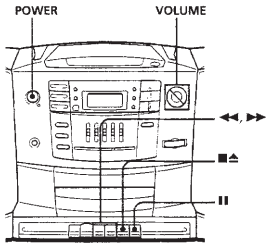
Display



Tip

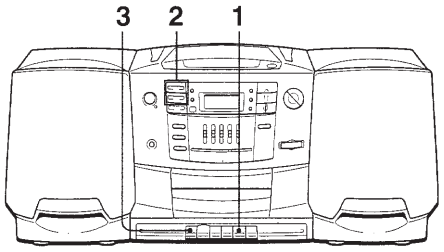
Next time you want to listen to a tape, just press ►. The player turns on automatically and starts playing the tape.

Use these buttons for additional operations



To	Press
adjust the volume	VOLUME +, – (VOL +, – on the remote, CFD-Z550 only)
stop playback	■⏏
fast-forward or rewind the tape	►► or ◄◄
pause playback	II Press the button again to resume play after pause.
eject the cassette	■⏏
turn on/off the player	POWER

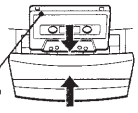
Recording on a tape



For hookup instructions, see pages 23 – 25.

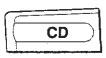
1

Press ■⏏ to open the tape compartment and insert a blank tape. Use TYPE I (normal) tape only.



2

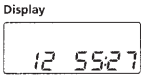
Select the program source you want to record.

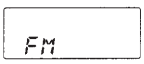


To record from the CD player: insert a CD (see page 4) and press CD.

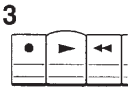
To record from the radio: tune in the station you want (see page 6).

Display





3



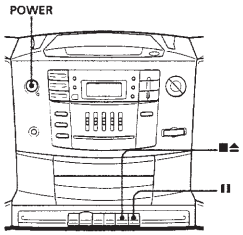
Start recording.

Press ● (► is depressed automatically).

Tips

- Adjusting the volume or the audio emphasis (see pages 26 and 27) will not affect the recording level.
- For the best results, use the AC power as a power source.

Use these buttons for additional operations



To	Press
stop recording	■⏏
pause recording	II Press the button again to resume recording.
turn on/off the player	POWER

To erase a recording, proceed as follows:

1 Insert a tape whose recording you want to erase into the tape deck.
2 Press TAPE.
3 Press ●.

SECTION 2
DISASSEMBLY

• The equipment can be removed using the following procedure.

Set → Cabinet assy, rear → CD block assy → Main board → CD board → Optical pick-up section

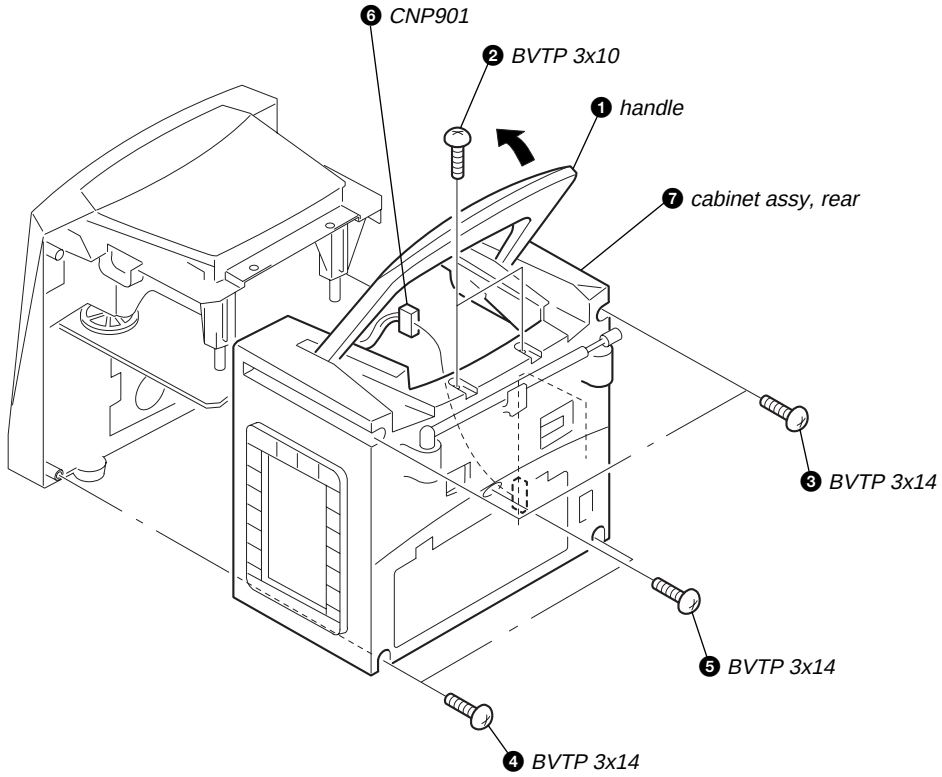
Cabinet assy, rear → MD block assy, REC SW board

Cabinet assy, rear → Power board

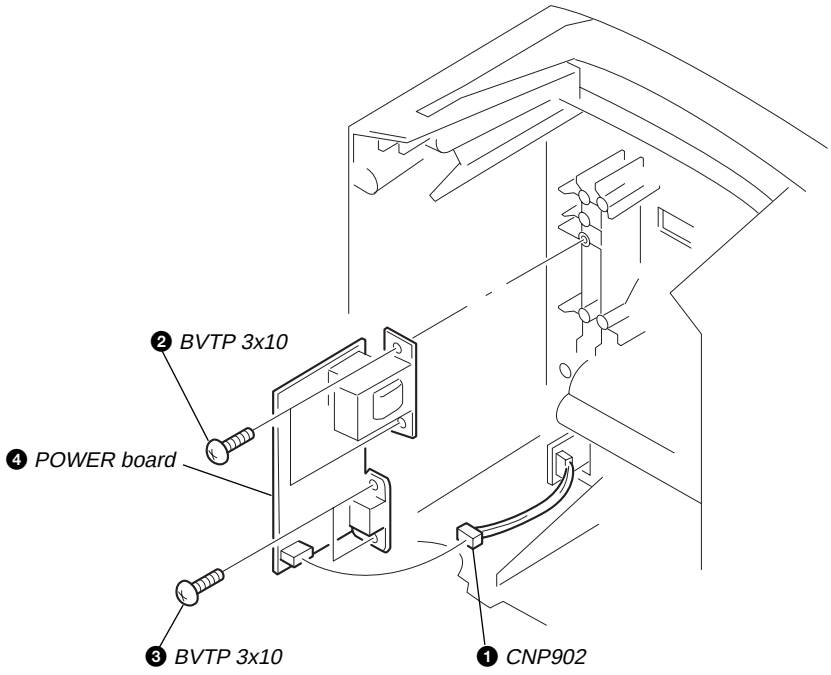
Main board → Control board → Sensor board (CFD-Z550)

Note : Follow the disassembly procedure in the numerical order given.

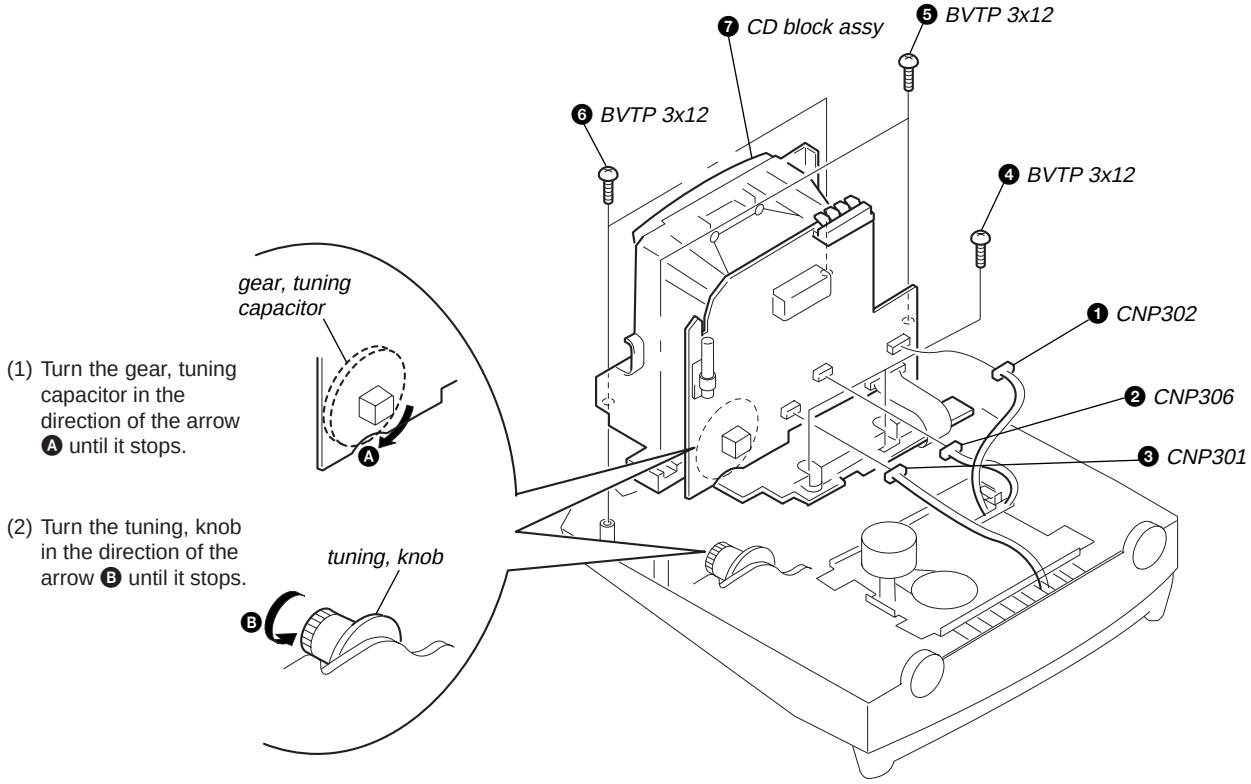
2-1. CABINET ASSY, REAR



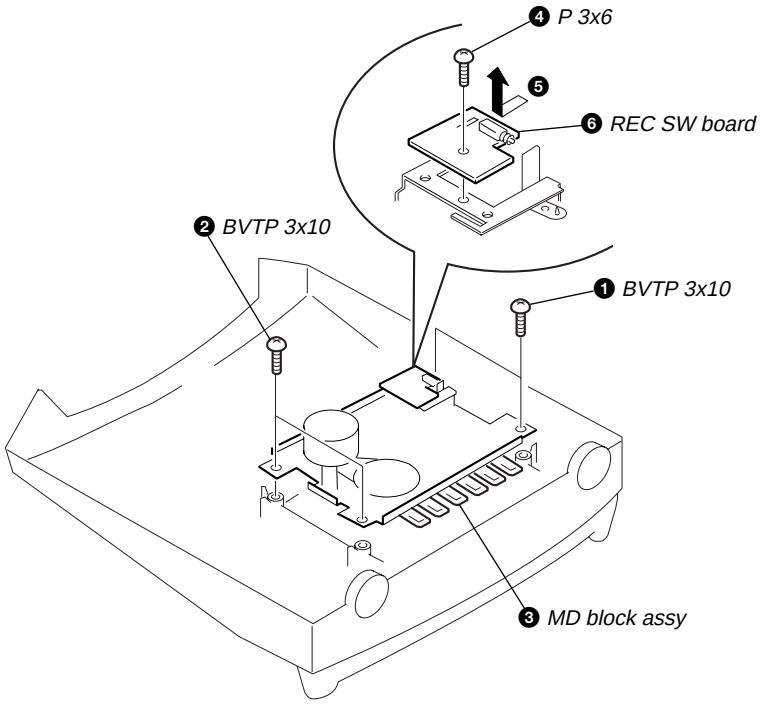
2-2. POWER BOARD



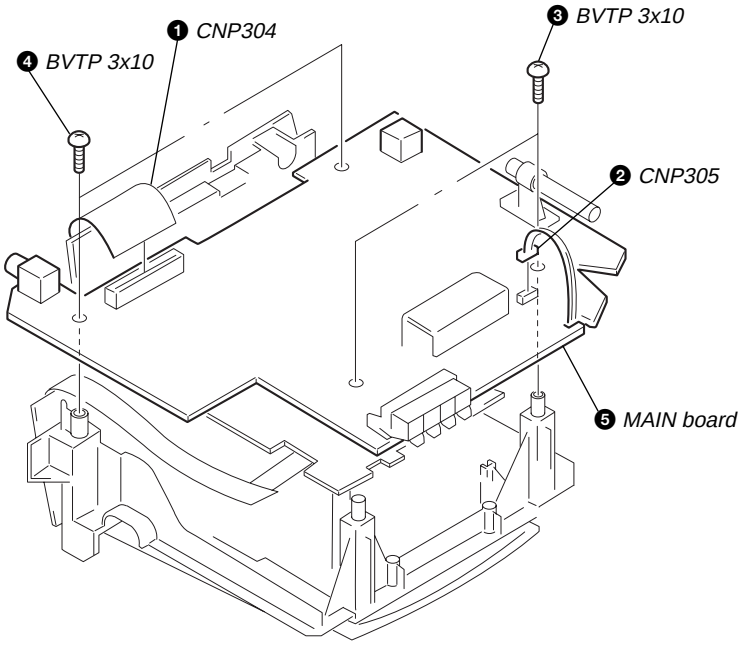
2-3. CD BLOCK ASSY


❼ CD block assy
❺ BVTP 3x12
❻ BVTP 3x12
❹ BVTP 3x12
❶ CNP302
❷ CNP306
❸ CNP301
gear, tuning capacitor
(1) Turn the gear, tuning capacitor in the direction of the arrow Ⓐ until it stops.
(2) Turn the tuning, knob in the direction of the arrow Ⓑ until it stops.
tuning, knob

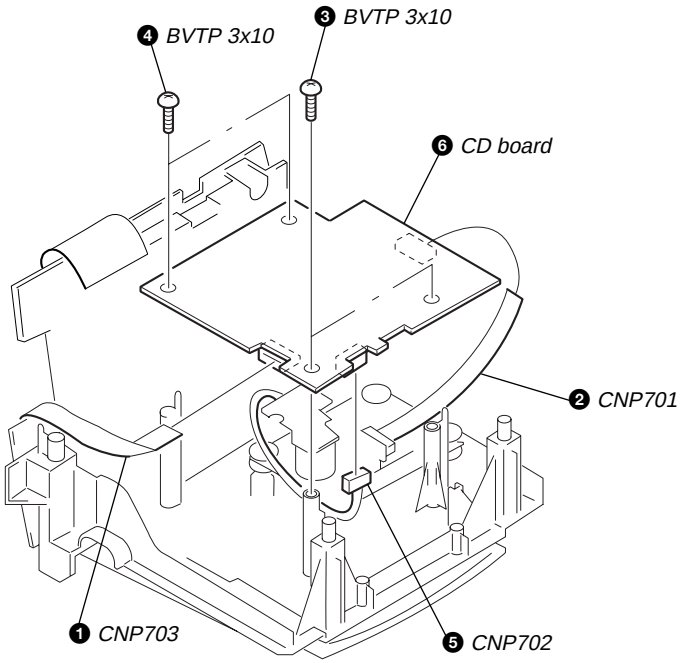
2-4. MD BLOCK ASSY, REC SW BOARD



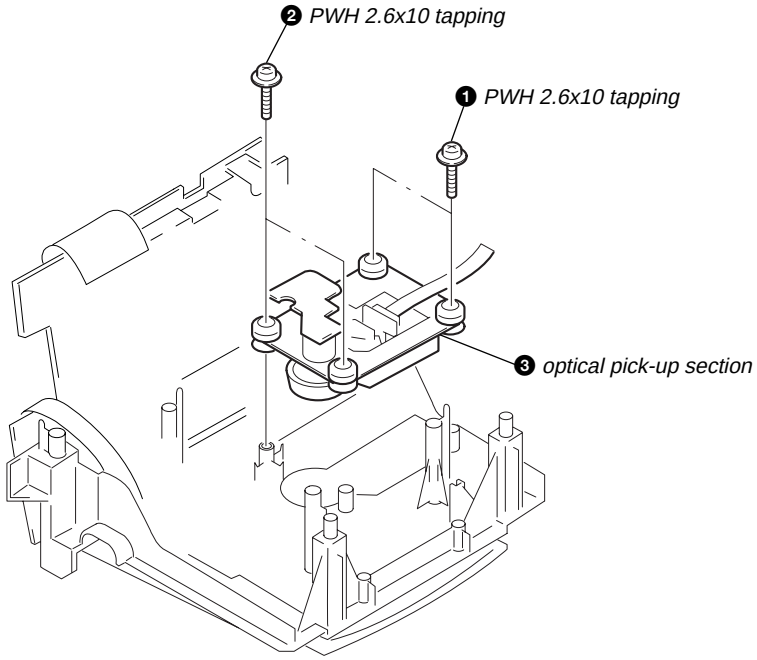
2-5. MAIN BOARD



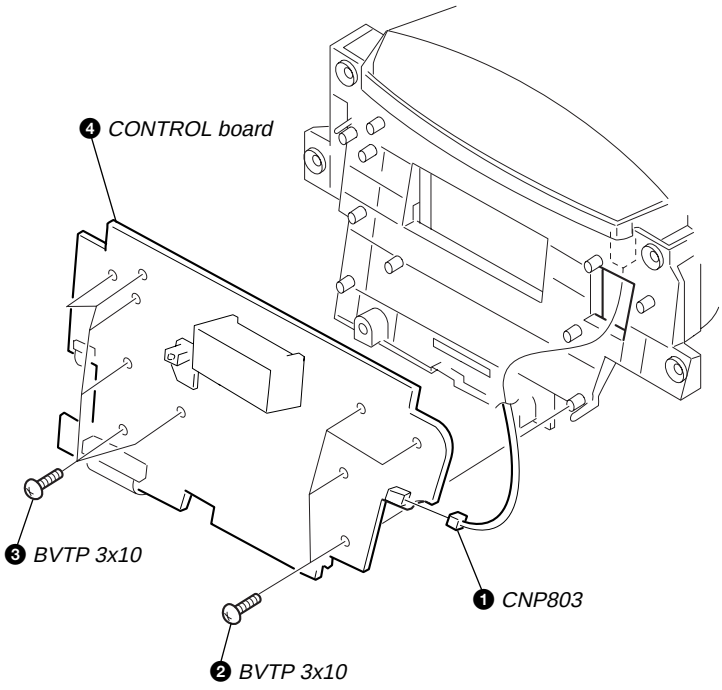
2-6. CD BOARD



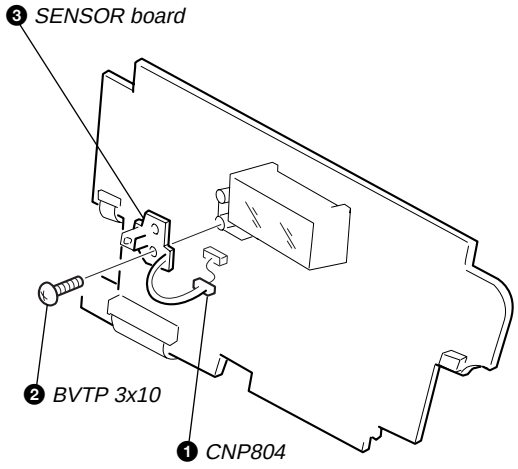
2-7. OPTICAL PICK-UP SECTION



2-8. CONTROL BOARD



2-9. SENSOR BOARD (CFD-Z550)



SECTION 3
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab :
   record/playback head, erase head, capstan, pinch roller, rubber belts, idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head magnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	30 – 70 g • cm (0.42 – 0.97 oz • inch)
FWD Back Tension	CQ-102C	1.5 – 5.5 g • cm (0.021 – 0.076 oz • inch)
FF	CQ-201B	more than 60 g • cm (more than 0.83 oz • inch)
REW	CQ-201B	more than 60 g • cm (more than 0.83 oz • inch)

Tape Tension Measurement

Mode	Tension meter	Meter Reading
FWD	CQ-403A	more than 100 g (more than 3.53 oz)

SECTION 4
ELECTRICAL ADJUSTMENTS

TAPE SECTION **0 dB = 0.775 V**

• Standard Output Level

Output terminal	HP OUT
load impedance	32 Ω
output signal level	0.25 V (–10 dB)

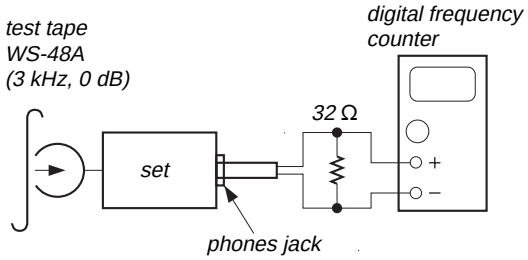
• Test Tape

Type	Signal	Used for
WS-48A	3 kHz, 0 dB	tape speed adjustment

Tape Speed Adjustment

Procedure:

Mode: playback



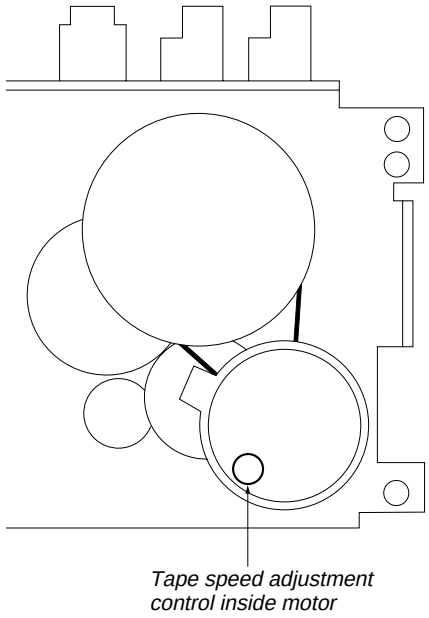
Adjust so that the value on the frequency counter is 3 kHz.

Specification Value:

Digital frequency counter
2,985 to 3,015 Hz

Adjust so that the frequency at the beginning and that at the end of tape winding are between 2,955 to 3,045 Hz.

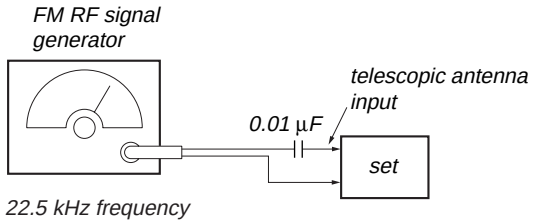
Adjustment Location:



TUNER SECTION | 0 dB = 1 µV

- **FM Section**

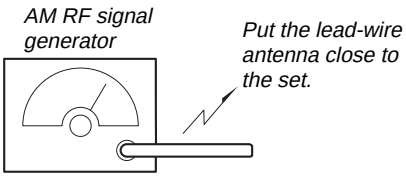
Setting:
RADIO BAND switch: FM



22.5 kHz frequency deviation by 400 Hz signal output level : as low as possible

- **AM Section**

Setting:
RADIO BAND switch: AM

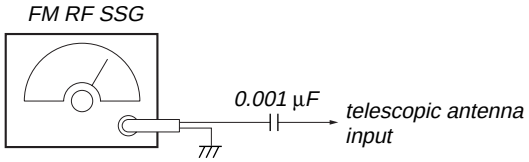


30% amplitude modulation by 400 Hz signal output level : as low as possible

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.
- Remove telescopic antenna in FM section adjustments.

FM VCO Adjustment

Setting:



Modulation: no modulation
Output level: 0.1 V (100 dB)

Procedure:

1. Adjust RV1 so that the reading on the frequency counter becomes in 76.0 kHz ± 50 Hz.

Adjustment Location: See page 14.

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L2	CT1-2
86.5 MHz	109.5 MHz

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L1	CT1-1
86.5 MHz	109.5 MHz

FM IF ADJUSTMENT
T1
10.7 MHz

AM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L4	CT1-4
520 kHz	1,680 kHz

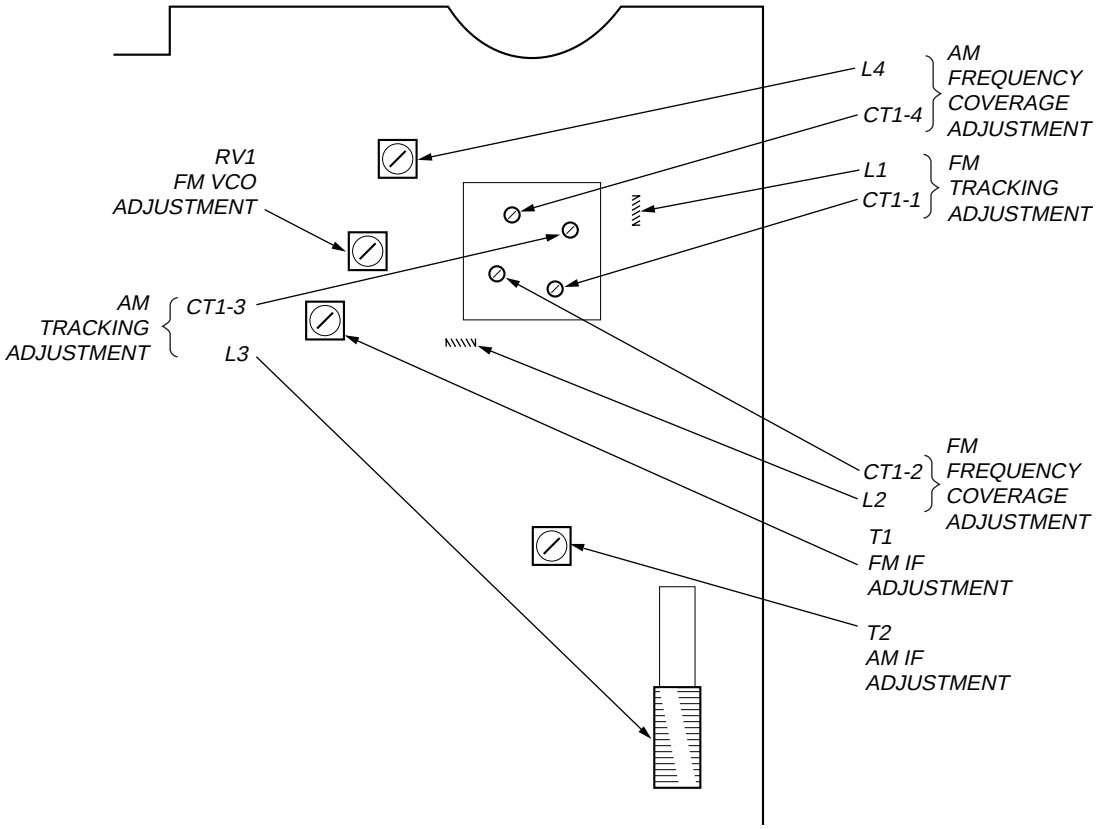
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	CT1-3
620 kHz	1,400 kHz

AM IF ADJUSTMENT
Adjust for a maximum reading on level meter.
T2
455 kHz

Adjustment Location: See page 14.

Adjustment Location:

– main board (component side) –



CD SECTION

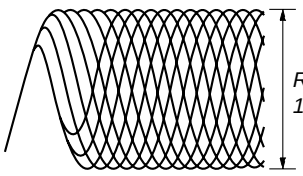
CD section adjustments are done automatically in this set.
In case of operation check, confirm that focus bias.

FOCUS BIAS CHECK

1. Connect the oscilloscope between IC701 pin ㉝ (TP RFO) and GND on CD board.
2. Insert the disc (YEDS-18). (Part No. : 3-702-101-01)
3. Press the ►II button.
4. Confirm that the oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

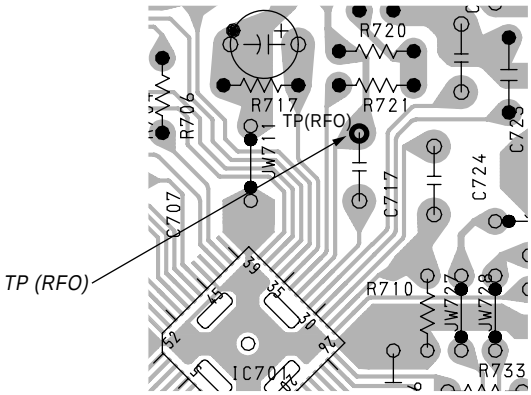
• RF signal reference waveform (eye pattern)

VOLT/DIV : 200 mV (10 : 1 probe in use)
TIME/DIV : 500 nS



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

Test Point:



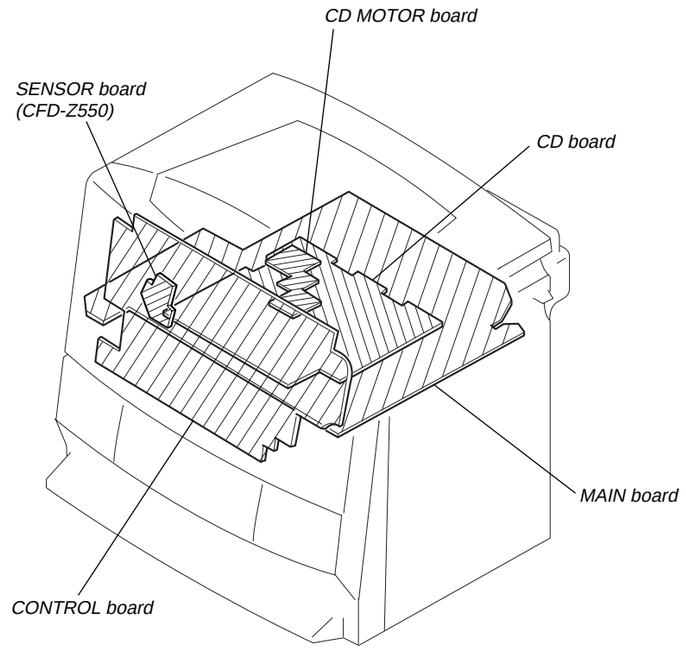
SECTION 5
DIAGRAMS

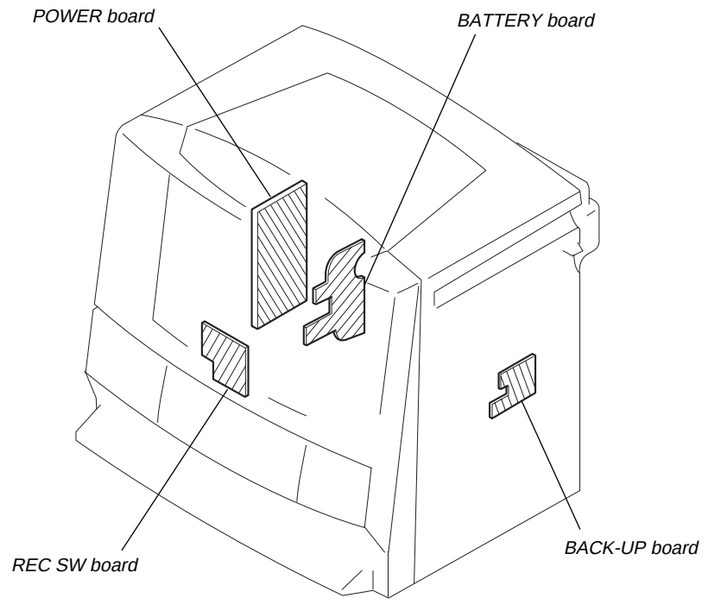
5-1. IC PIN DESCRIPTION

• IC801 CXP83620-008Q (SYSTEM CONTROL)

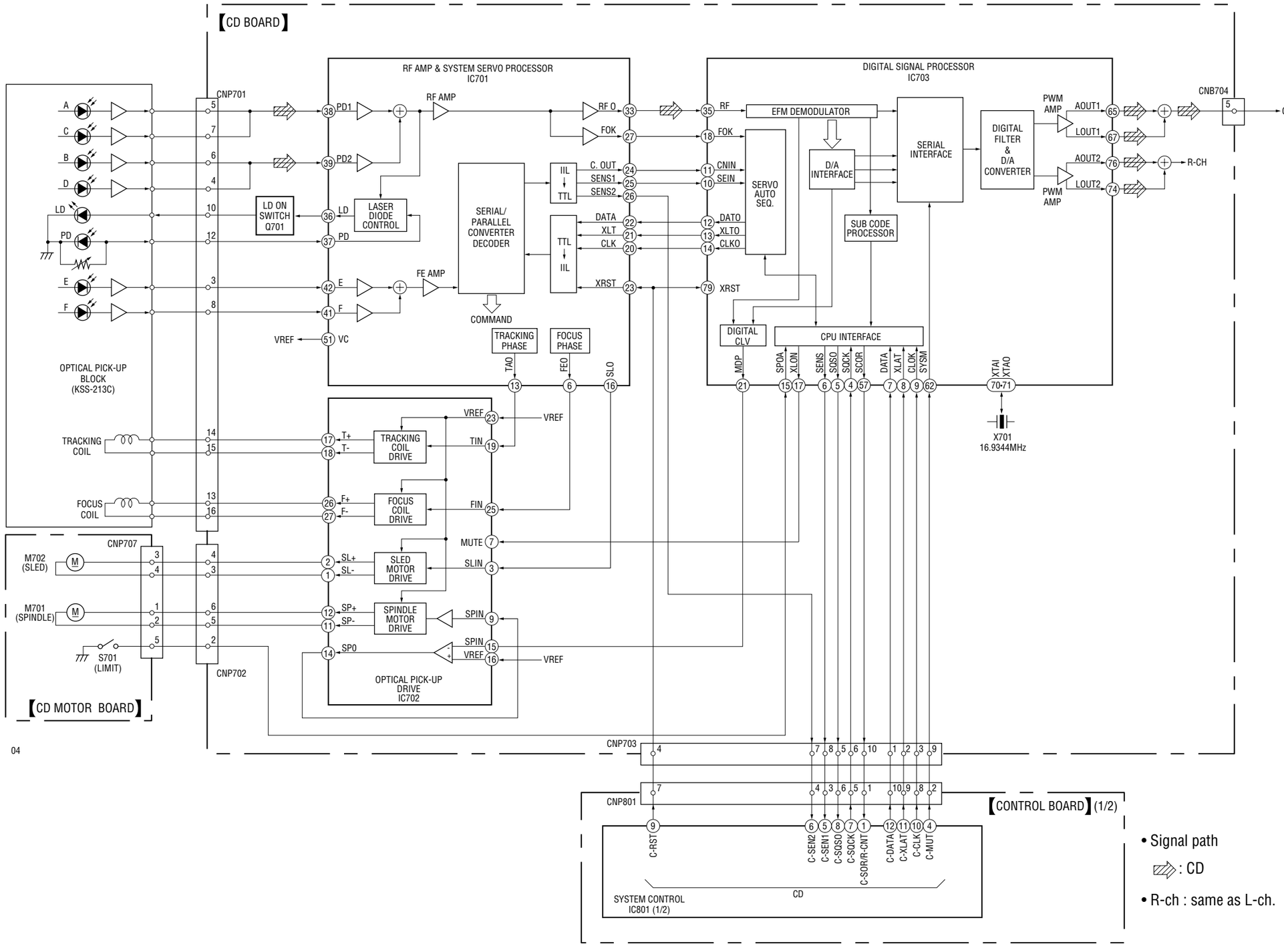
Pin No.	Pin Name	I/O	Pin Description
1	C-SCOR	I	CD SCOR input
2	RMC	I	Sircs receiver input
3	MOTOR-CONT	O	Motor control signal output
4	NC	—	Contact to pin 78.
5	C-SEN1	I	CD SENSE-1 input
6	C-SEN2	I	CD SENSE-2 input
7	C-SQCK	O	CD Sub-Q read clock output
8	C-SQSO	I	CD Sub-Q data input
9	C-RST	O	CD reset output
10	C-CLK	O	CD serial clock output
11	C-LAT	O	CD serial latch output
12	C-DATA	O	CD serial data output
13	REC	I	Tape record signal input L: REC
14	ST-IN	I	Stereo signal input
15	NC	—	Not used.
16	FM/AM	O	Radio band output
17	NC	—	Not used.
18	V-LAT	O	Volume latch output
19	V-DATA	O	Volume data output
20	V-CLK	O	Volume clock output
21	C-DOOR	I	CD door open/close switch input L: Close
22	P-CON	O	System power control output
23 – 25	KEY-1 – 3	I	Key input
26	VH	I	Operation voltage detection input
27	INIT	O	Initial set signal output
28	VERSION	I	Mode set pin
29	VM	I	Voltage detection input
30	$\overline{\text{RST}}$	I	System reset input
31	EXTAL	I	Oscillation input (4.19 MHz)
32	XTAL	O	Oscillation output (4.19 MHz)
33	VSS	—	GND
34	VL	O	LCD drive port ON/OFF output
35 – 37	VLC-3 – 1	O	LCD drive voltage terminal
38 – 41	COM0 – 3	O	LCD drive common output
42 – 59	SEG0 – 17	O	LCD drive segment output
60 – 65	NC	—	Not used.
66	A-MUTE	O	Audio mute output H: Mute
67	SOUND	O	Graphic equalizer on/off signal output
68	C-MUTE	O	CD block mute output H: Mute
69	TAPE	O	Tape function output H: Tape
70	RADIO	O	Tuner function output H: Radio
71	CD	O	CD function output L: CD
72	VDD	—	Power supply pin (+5 V)
73	TX	O	Oscillation output (150 kHz)
74	TEX	I	Oscillation input (150 kHz)
75	NC	—	Not used.
76	ISS-A	O	Not used.
77	ISS-B	O	Not used.
78	NC	—	Contact to pin 4.
79	TC-PLAY	I	Tape play switch input L: Tape
80	REGCK	I	Regulator check signal input H: ON

5-2. CIRCUIT BOARDS LOCATION

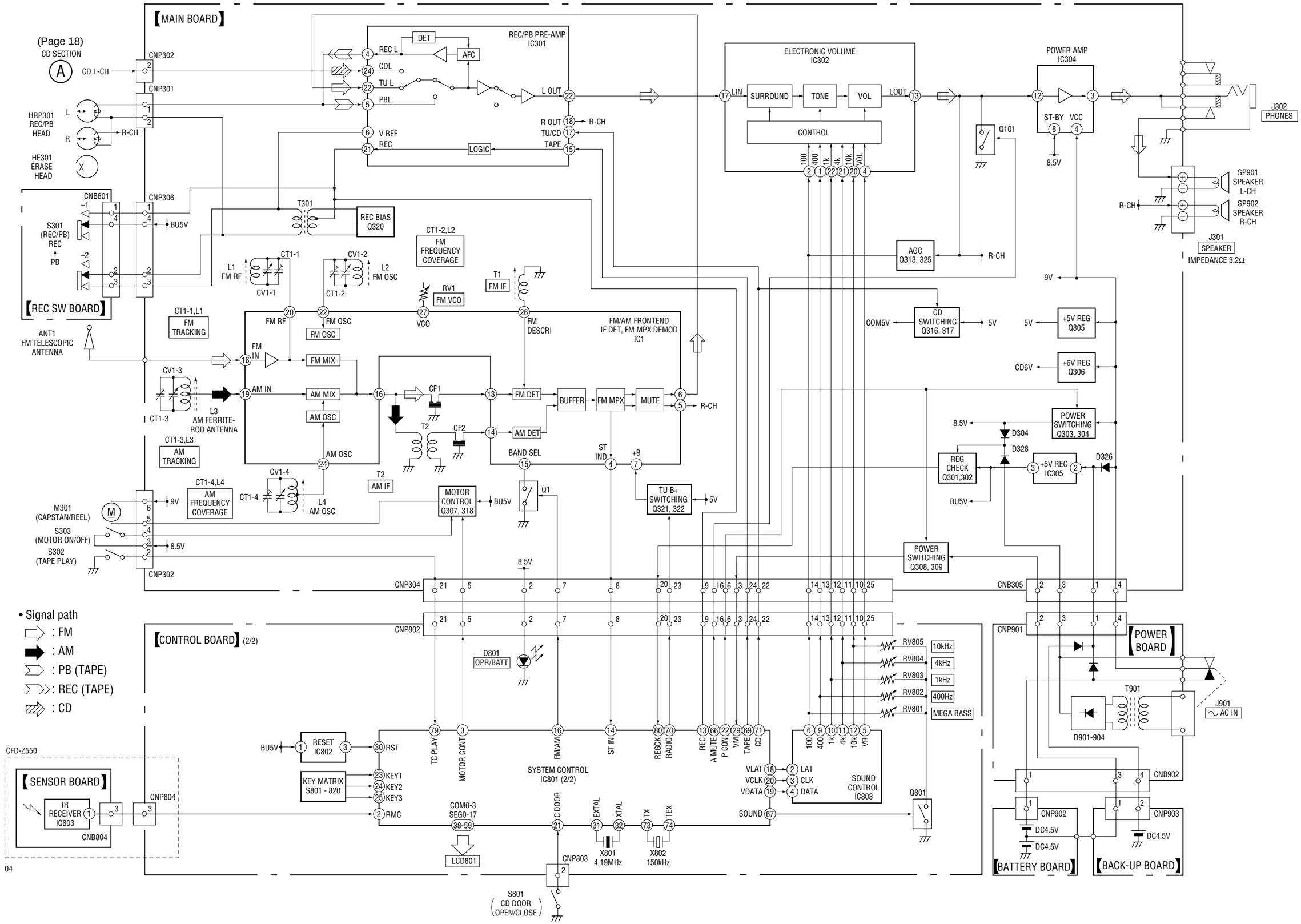




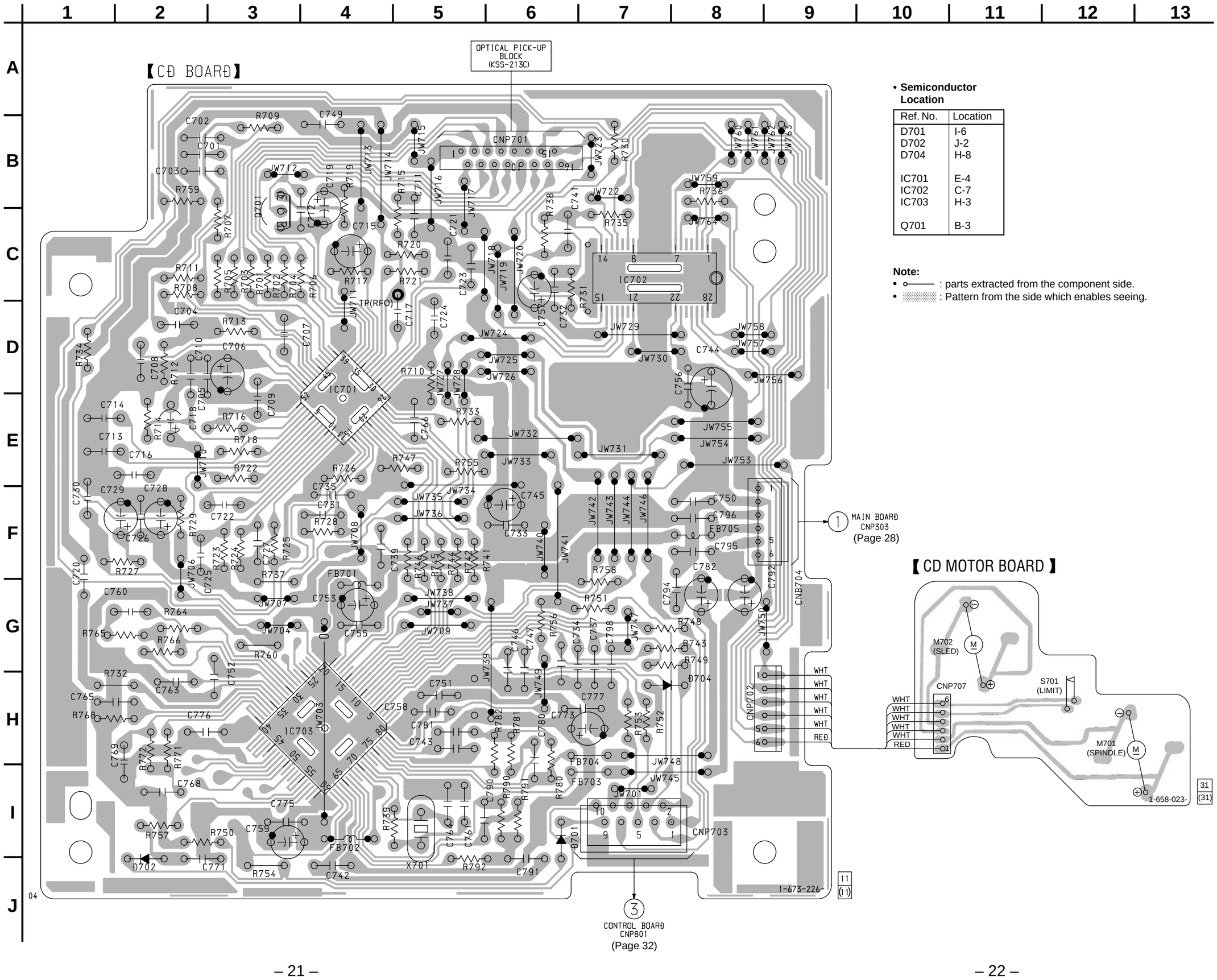
5-3. BLOCK DIAGRAM — CD SECTION —



5-4. BLOCK DIAGRAM — MAIN SECTION —



5-5. PRINTED WIRING BOARDS — CD SECTION — • Refer to page 16 for Circuit Boards Location.

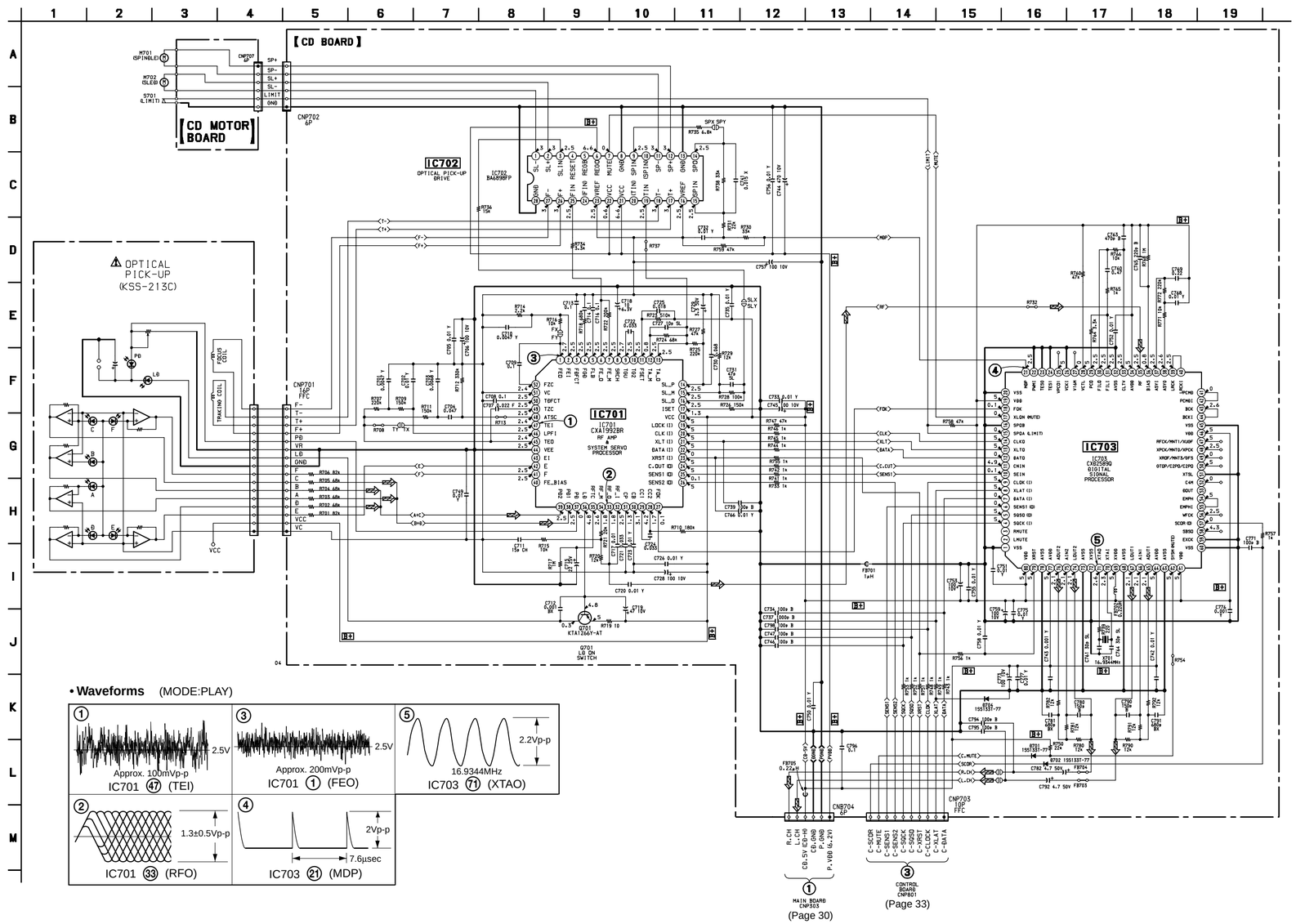


- **Semiconductor Location**

Ref. No.	Location
D701	I-6
D702	J-2
D704	H-8
IC701	E-4
IC702	C-7
IC703	H-3
Q701	B-3

Note:
- ○——— : parts extracted from the component side.
- ▒▒▒▒ : Pattern from the side which enables seeing.

5-6. SCHEMATIC DIAGRAM — CD SECTION — • Refer to page 37 for IC Block Diagrams.



Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B+ Line.
- Power voltage is dc 9 V and fed with regulated dc power supply from battery terminal.
- Voltage is dc with respect to ground under no-signal condition.
  no mark : CD (STOP)
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD

5-7. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 16 for Circuit Boards Location.

• **Semiconductor Location**

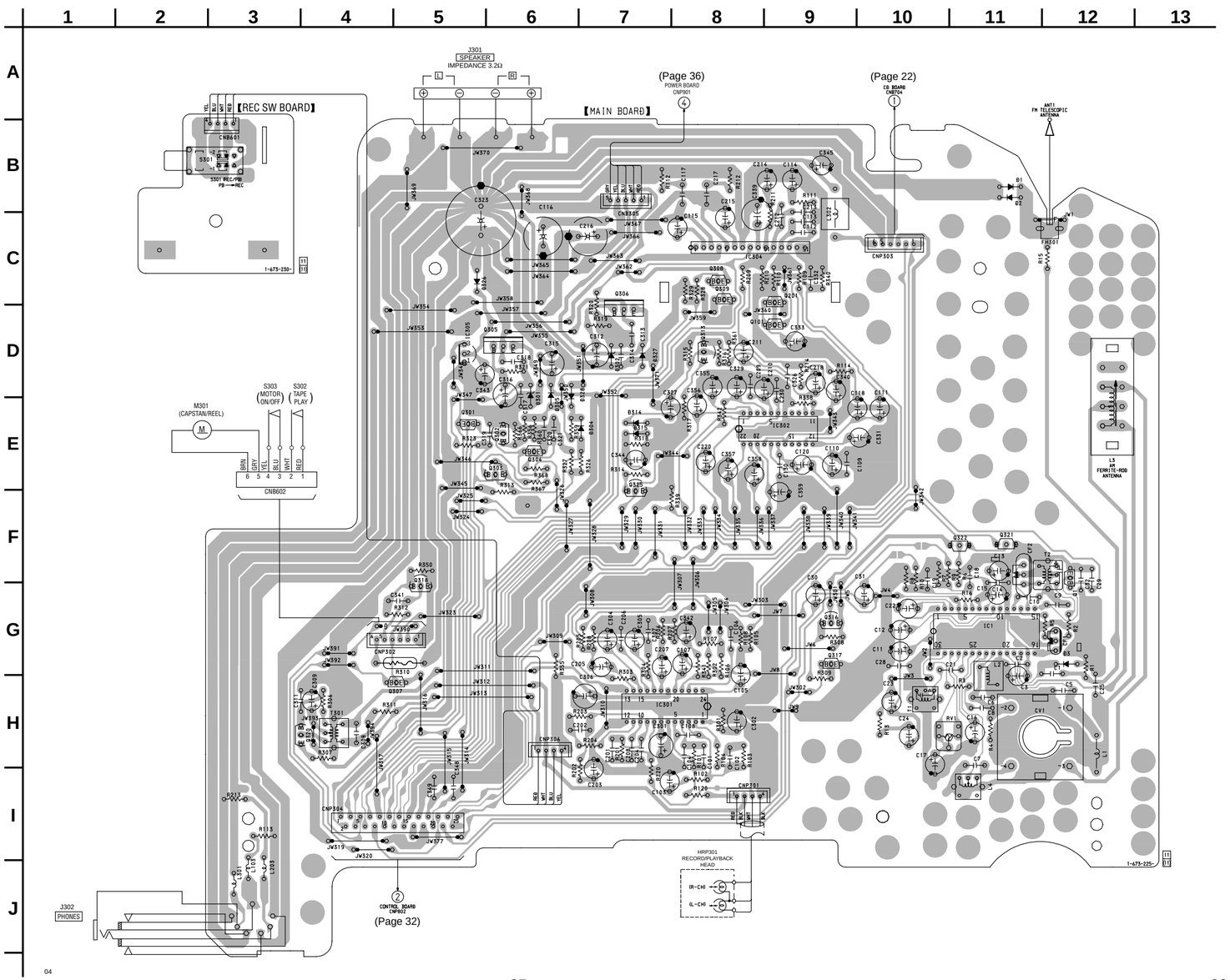
Ref. No.	Location
D1	B-11
D2	B-11
D3	G-12
D301	E-6
D302	D-7
D304	E-7
D305	E-6
D314	E-7
D315	E-7
D326	C-5
D327	D-7
D328	D-7
IC1	G-11
IC301	H-7
IC302	E-9
IC304	C-8
IC305	D-5
Q1	G-12
Q101	D-8
Q201	C-9
Q301	E-5
Q302	E-6
Q303	E-6
Q304	E-6
Q305	D-6
Q306	C-7
Q307	H-4
Q308	C-8
Q309	C-8
Q313	D-8
Q316	G-9
Q317	G-9
Q318	F-5
Q320	H-4
Q321	F-11
Q322	F-11
Q325	F-7

Note on Printed Wiring Boards:
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- —▭— : nonflammable resistor.
- ▭ : panel designation.
- B+ : B+ Line.
- ▬ : adjustment for repair.

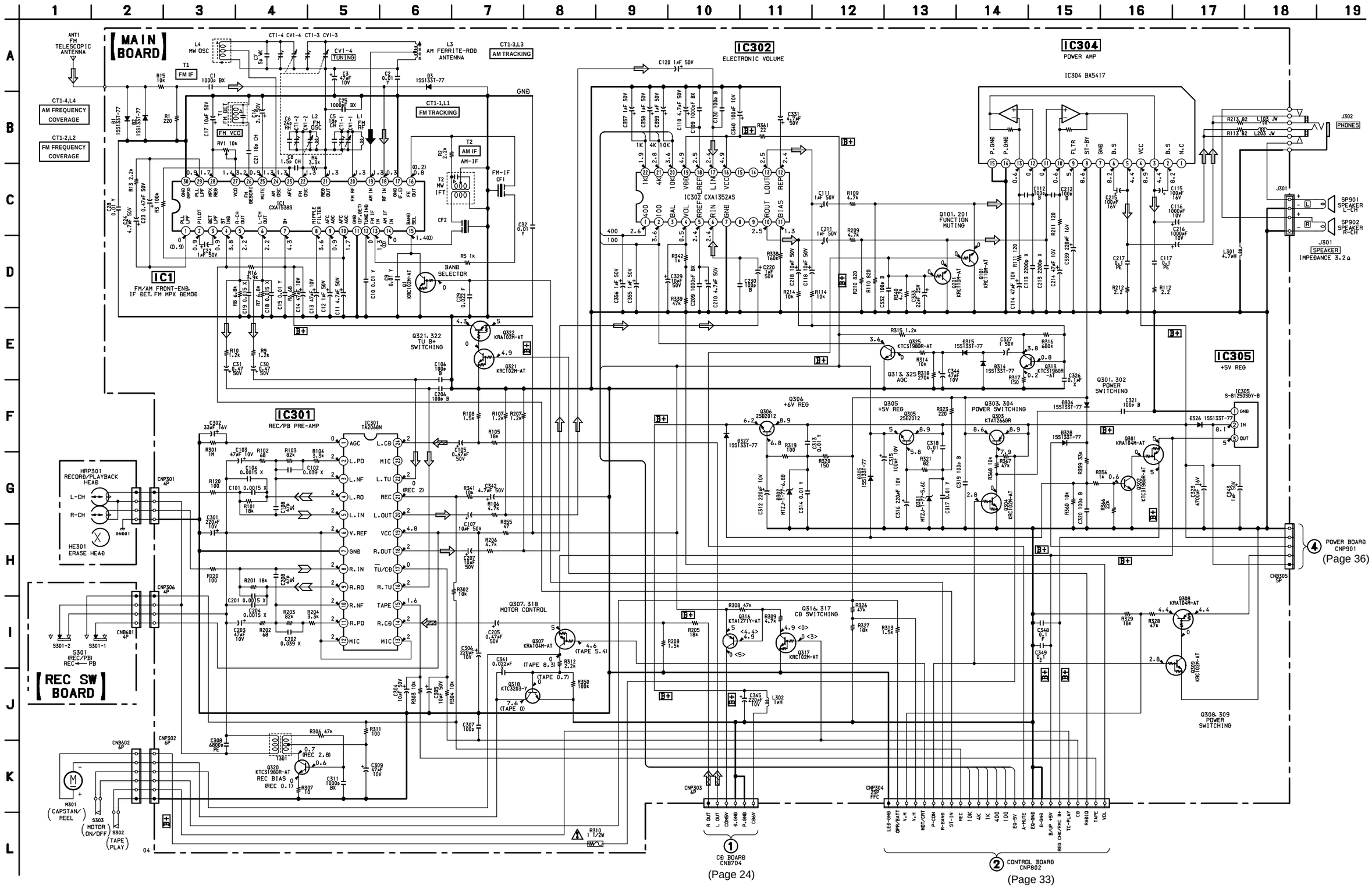
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Power voltage is dc 9 V and fed with regulated dc power supply from battery terminal.
  no mark : FM
  ( ) : PB (TAPE)
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇨ : PB (TAPE)
  ⇨ : REC (TAPE)
  ⇨ : CD

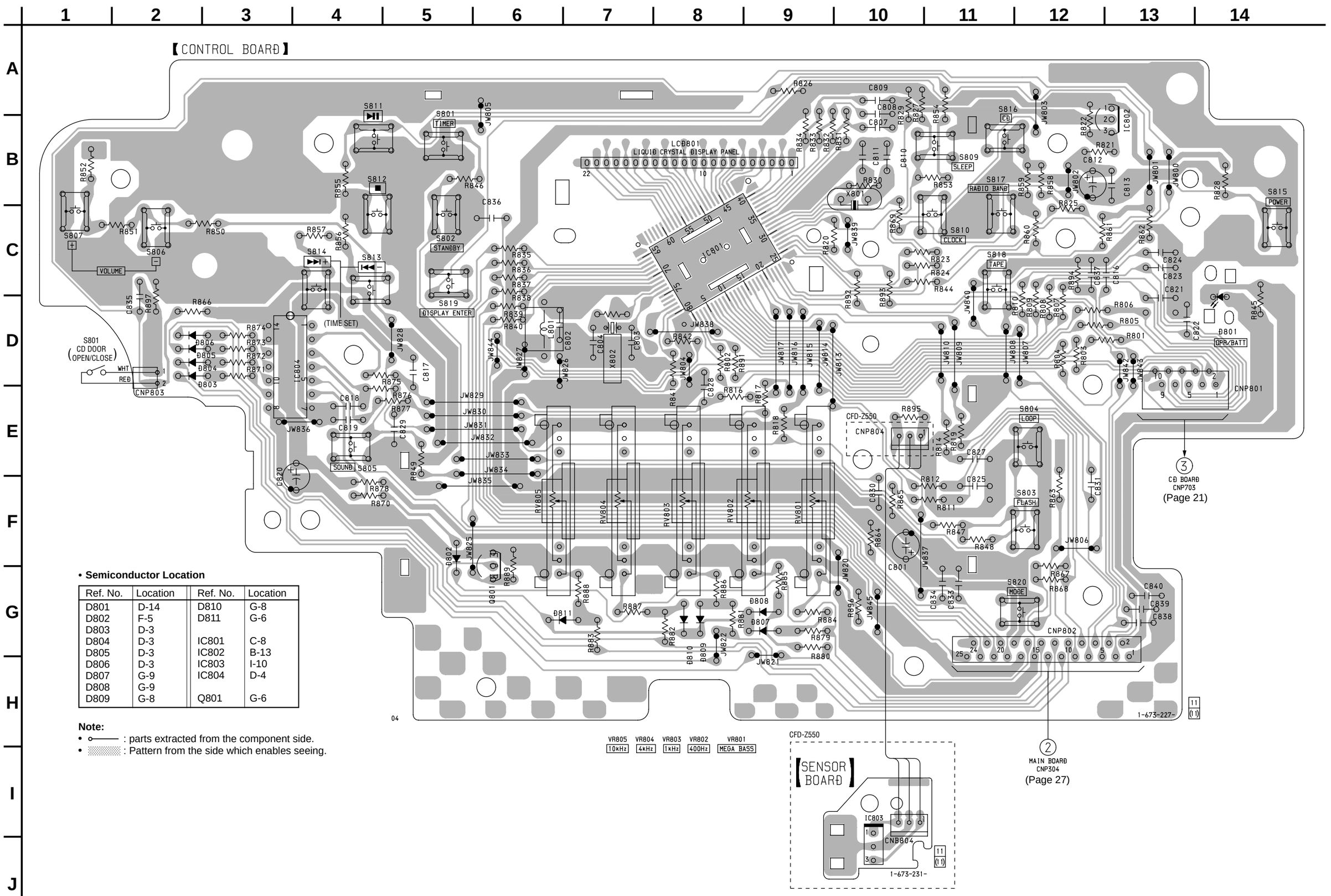


5-8. SCHEMATIC DIAGRAM — MAIN SECTION —

- Refer to page 26 for Note on Schematic Diagram.
- Refer to page 39 for IC Block Diagrams.



5-9. PRINTED WIRING BOARDS — CONTROL SECTION — • Refer to page 16 for Circuit Boards Location.



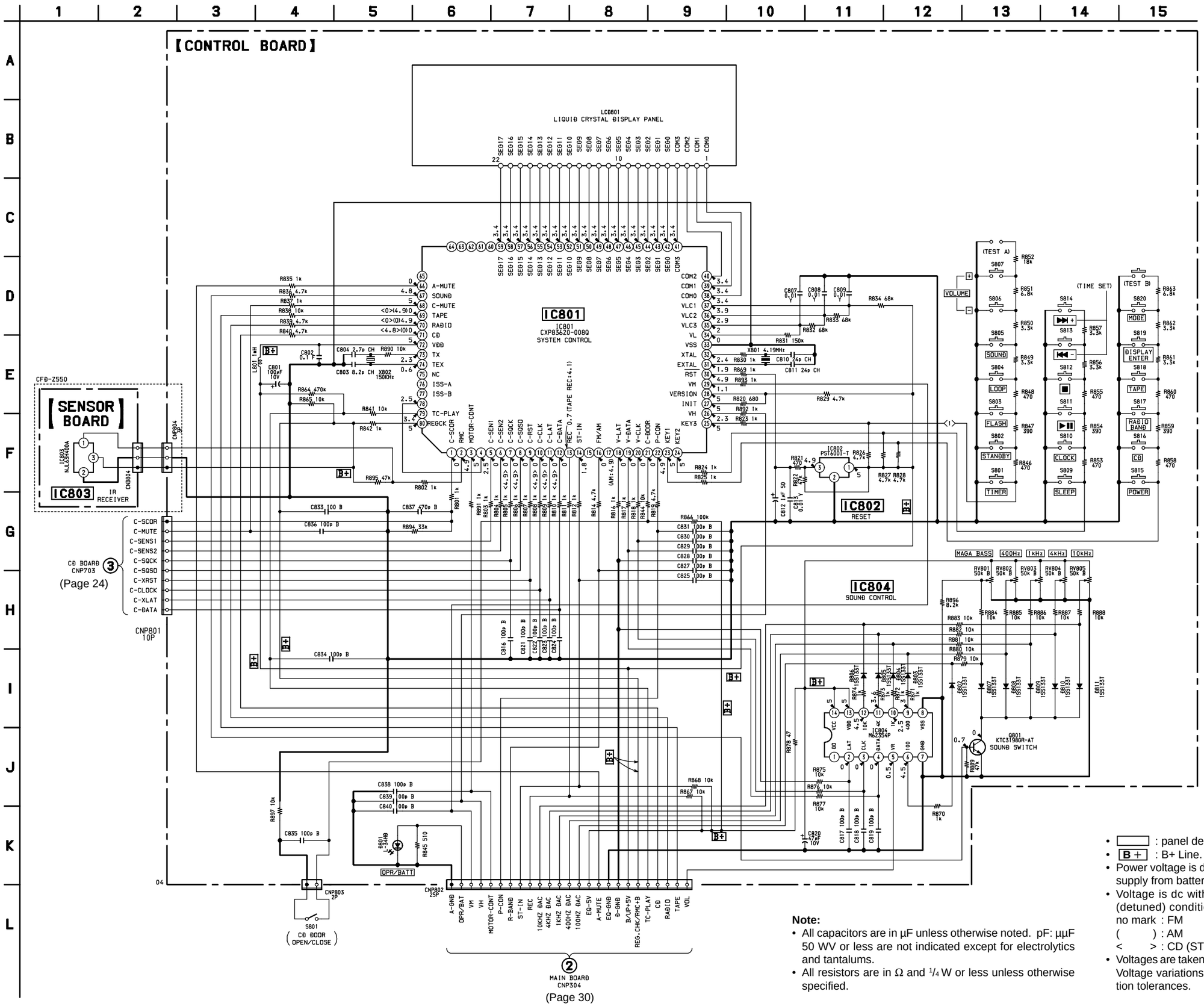
• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D801	D-14	D810	G-8
D802	F-5	D811	G-6
D803	D-3		
D804	D-3	IC801	C-8
D805	D-3	IC802	B-13
D806	D-3	IC803	I-10
D807	G-9	IC804	D-4
D808	G-9		
D809	G-8	Q801	G-6

Note:

- o—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

5-10. SCHEMATIC DIAGRAM — CONTROL SECTION — • Refer to page 40 for IC Block Diagrams.

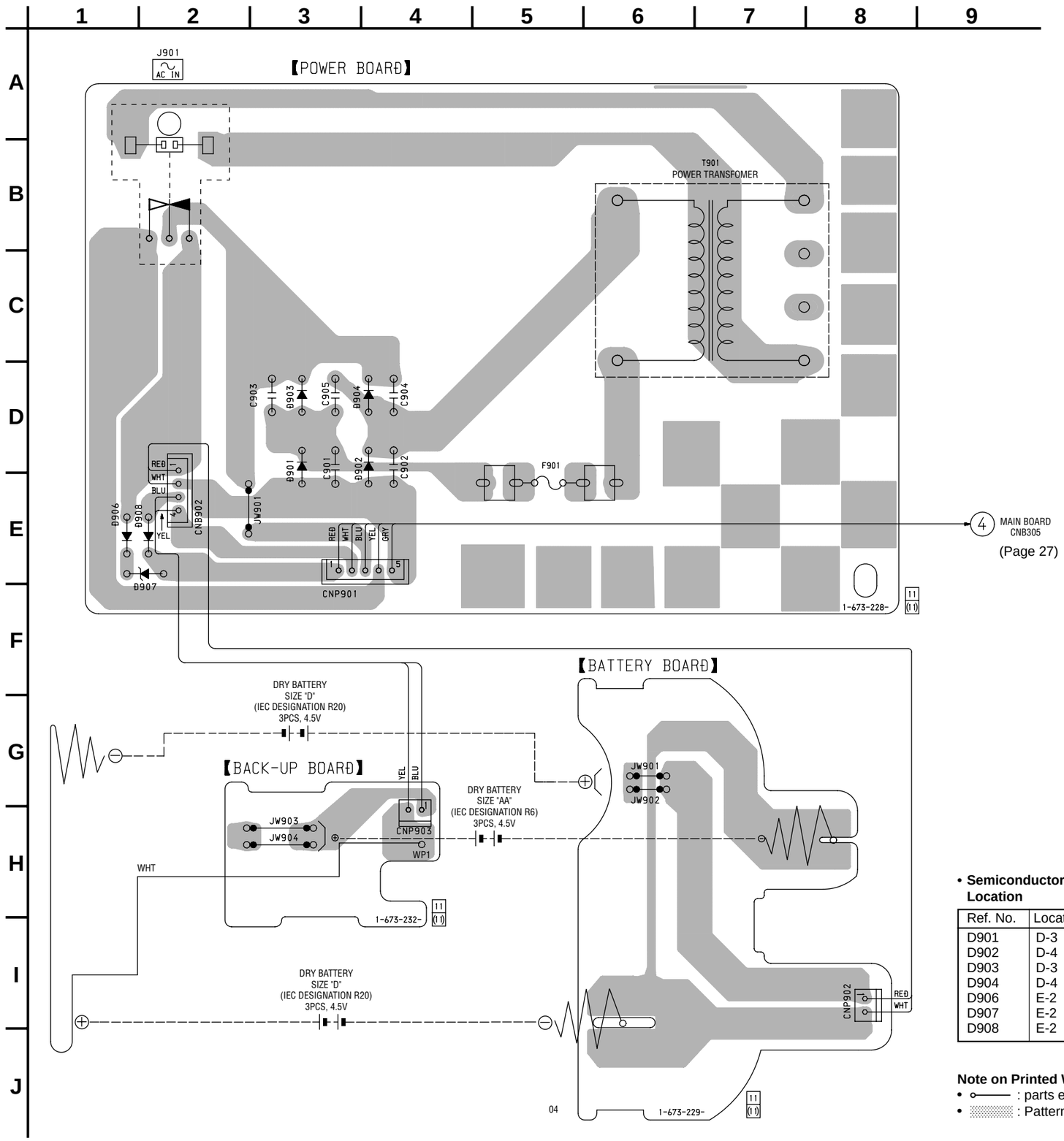


Note:

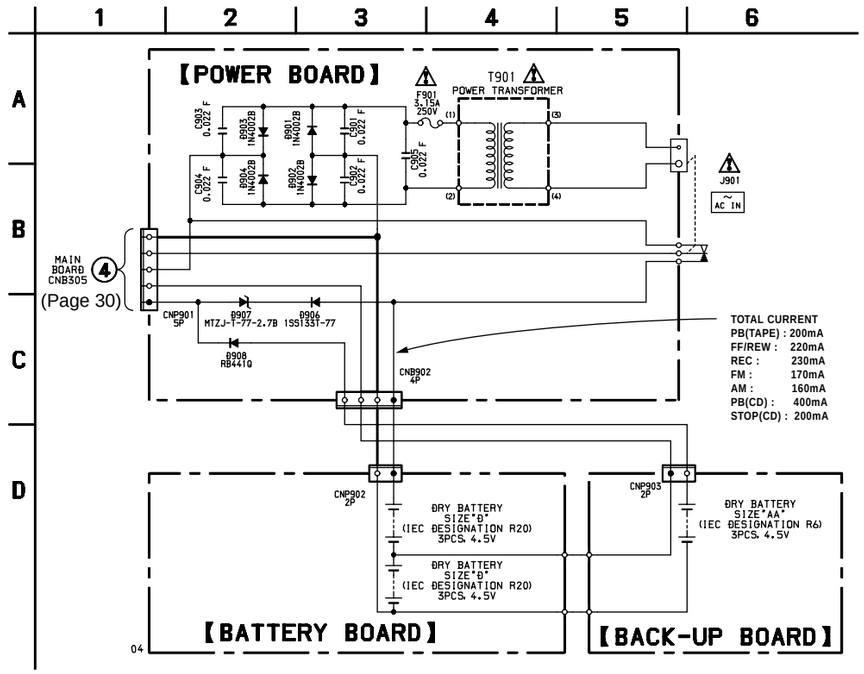
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 9 V and fed with regulated dc power supply from battery terminal.
- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : AM
  < > : CD (STOP)
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

5-11. PRINTED WIRING BOARDS — POWER SECTION — • Refer to page 16 for Circuit Boards Location.



5-12. SCHEMATIC DIAGRAM — POWER SECTION —



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- **B +** : B+ Line.
- Total current is measured with no cassette installed.

- **Semiconductor Location**

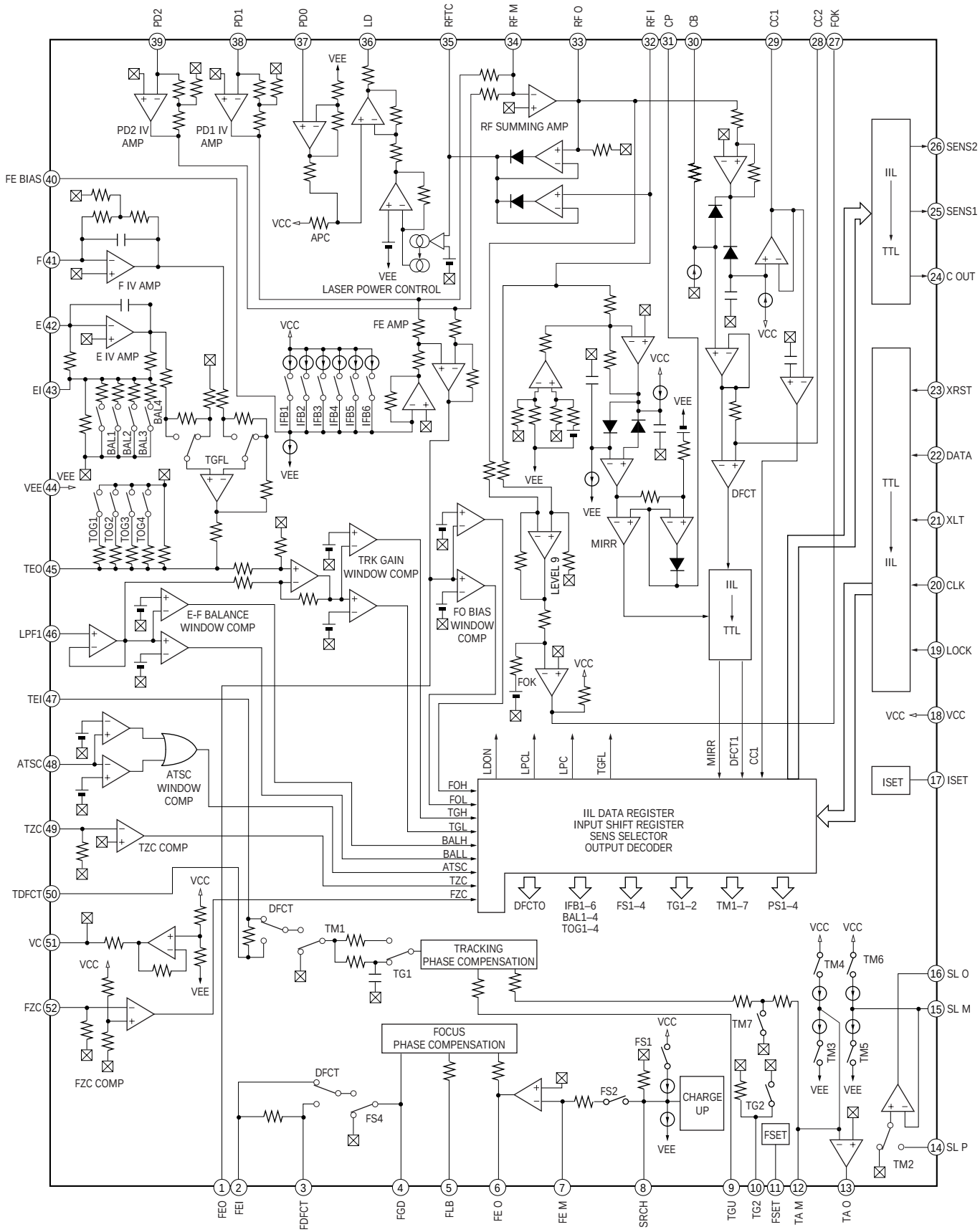
Ref. No.	Location
D901	D-3
D902	D-4
D903	D-3
D904	D-4
D906	E-2
D907	E-2
D908	E-2

Note on Printed Wiring Boards:

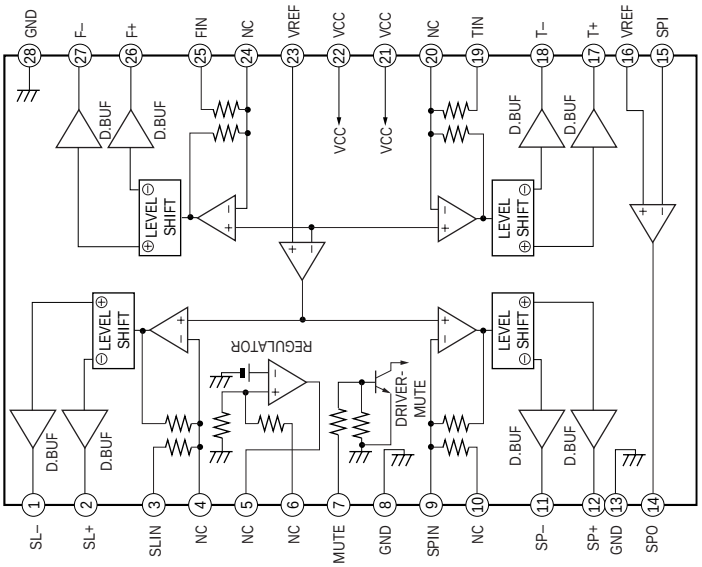
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

• **IC Block Diagrams**

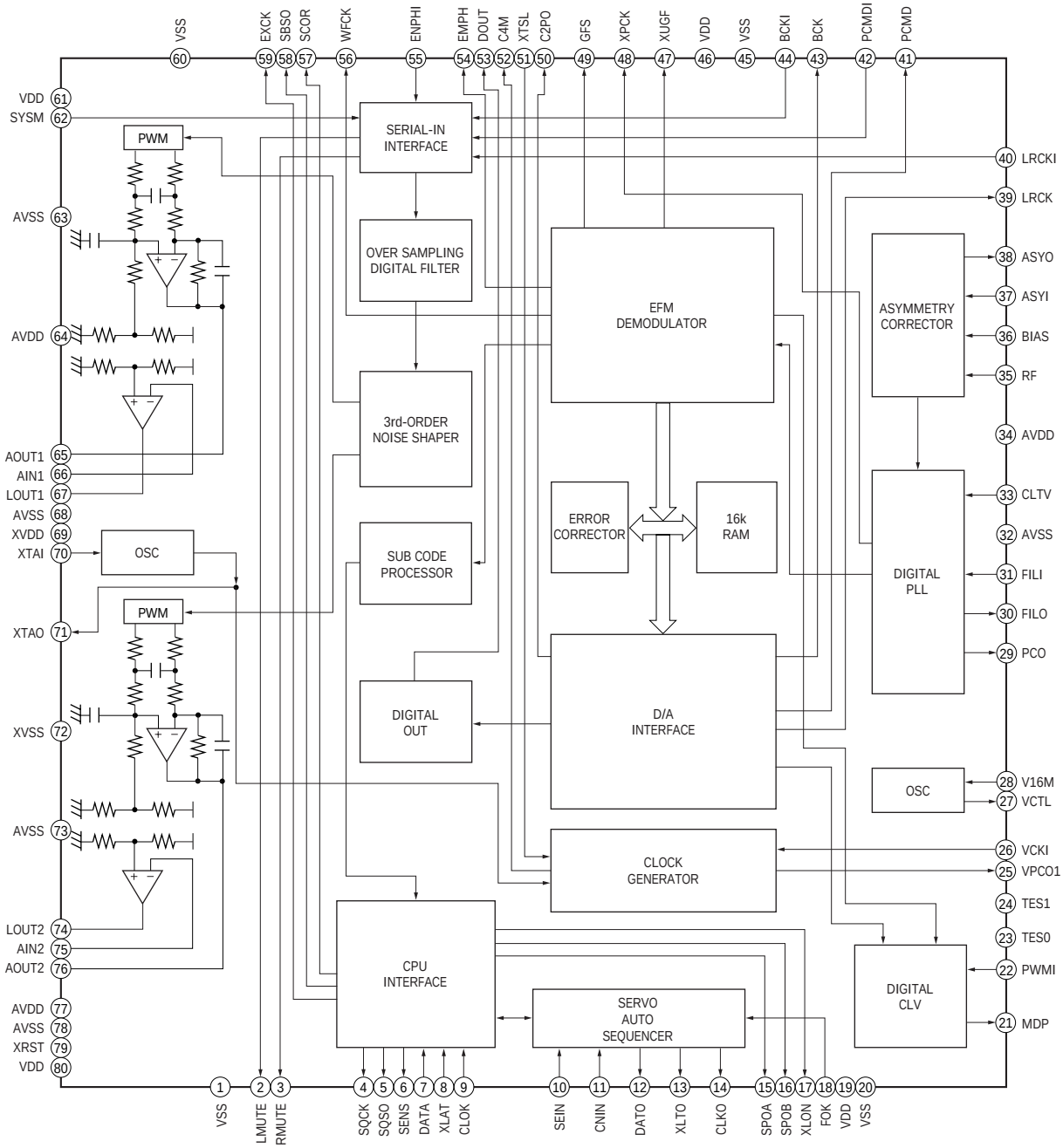
IC701 CXA1992BR



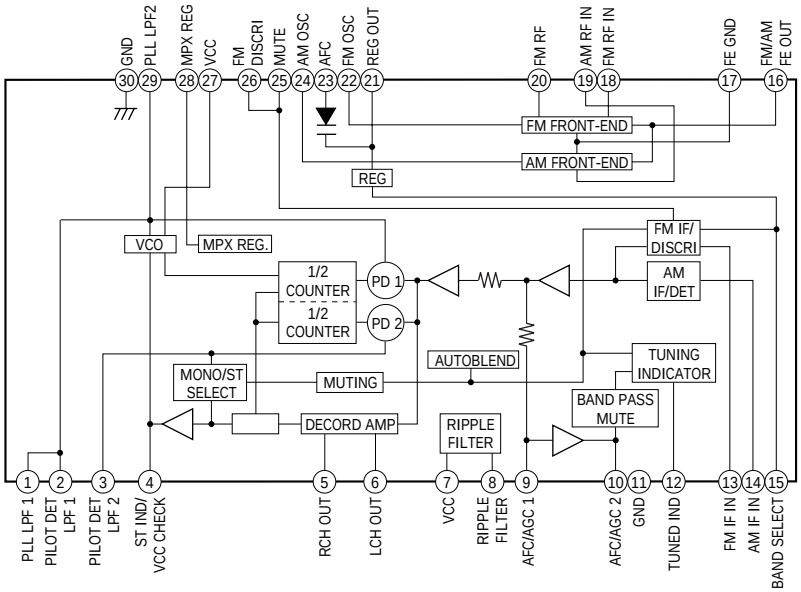
IC702 BA6898FP



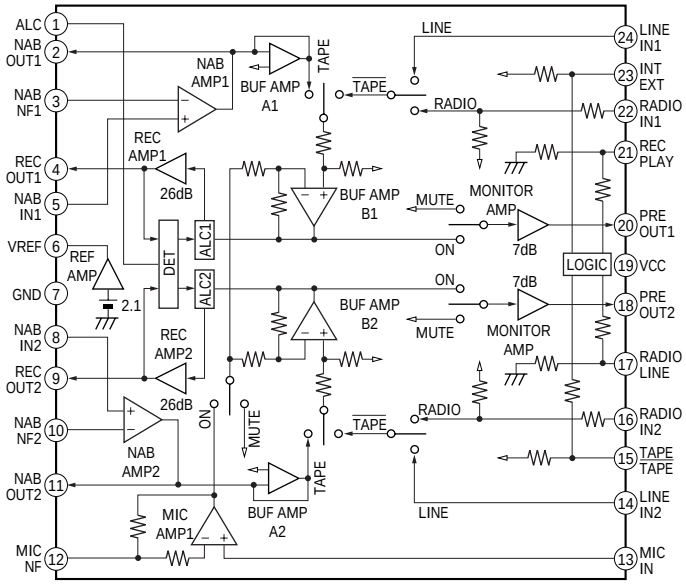
IC703 CXD2589Q



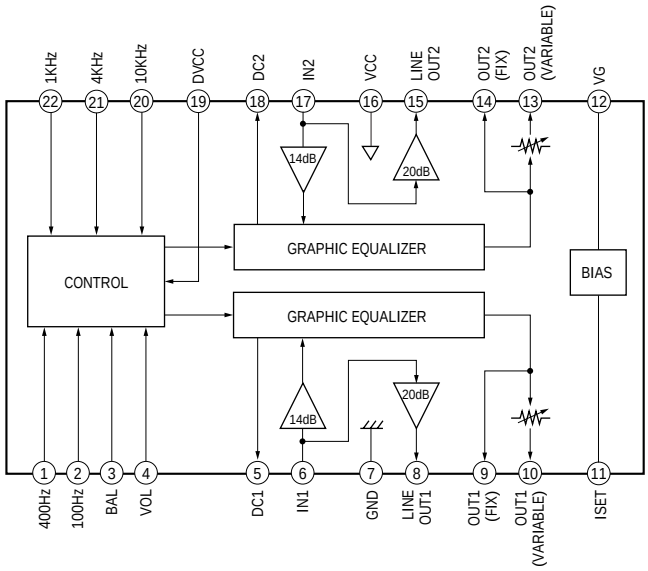
IC1 CXA1538S



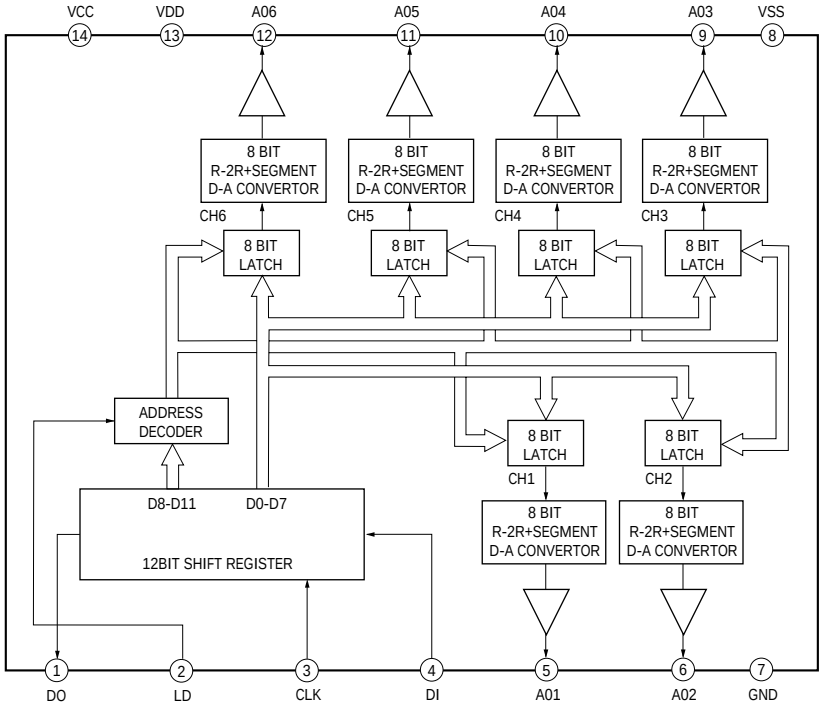
IC301 TA2068N



IC302 CXA1352AS



IC804 M62354P



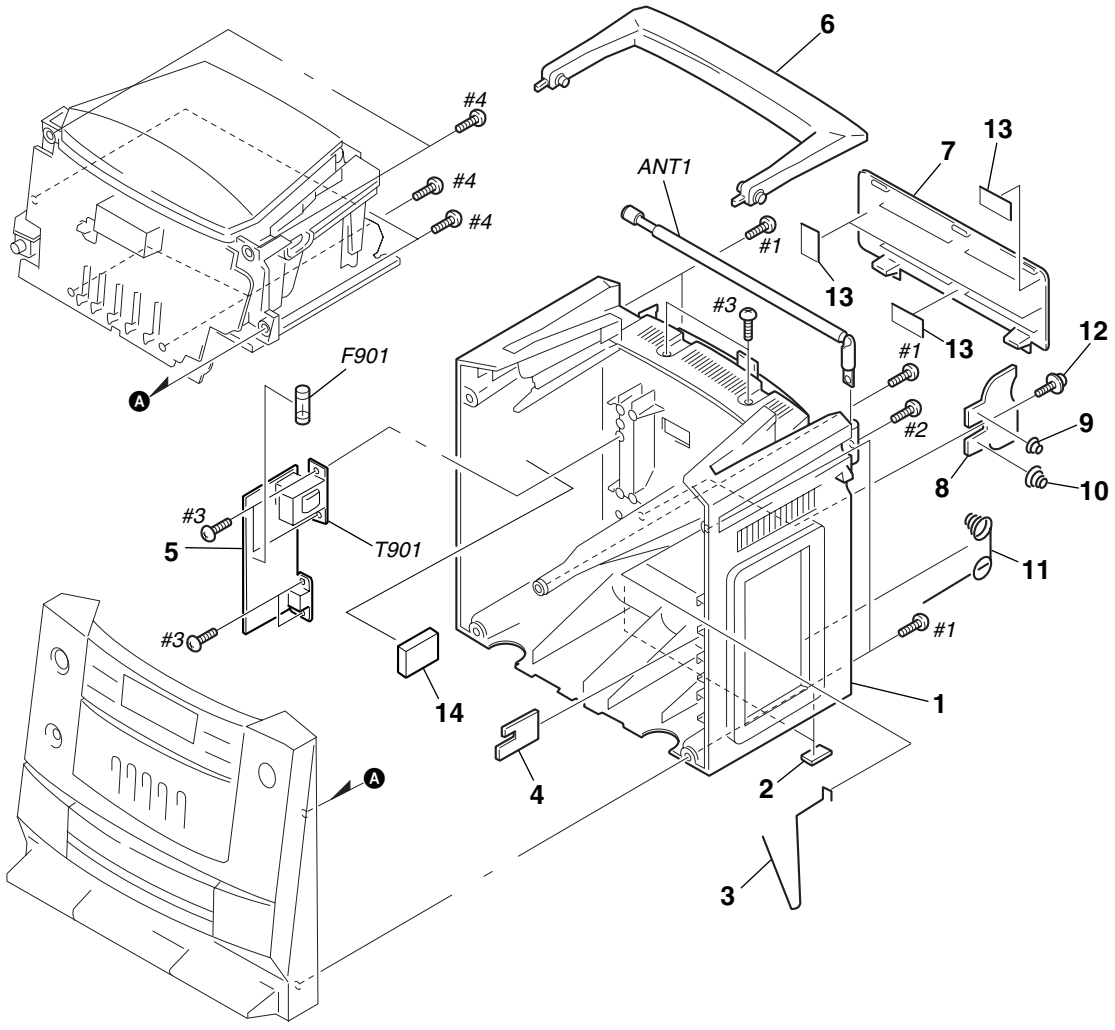
SECTION 6
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories and hardware (# mark) list are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

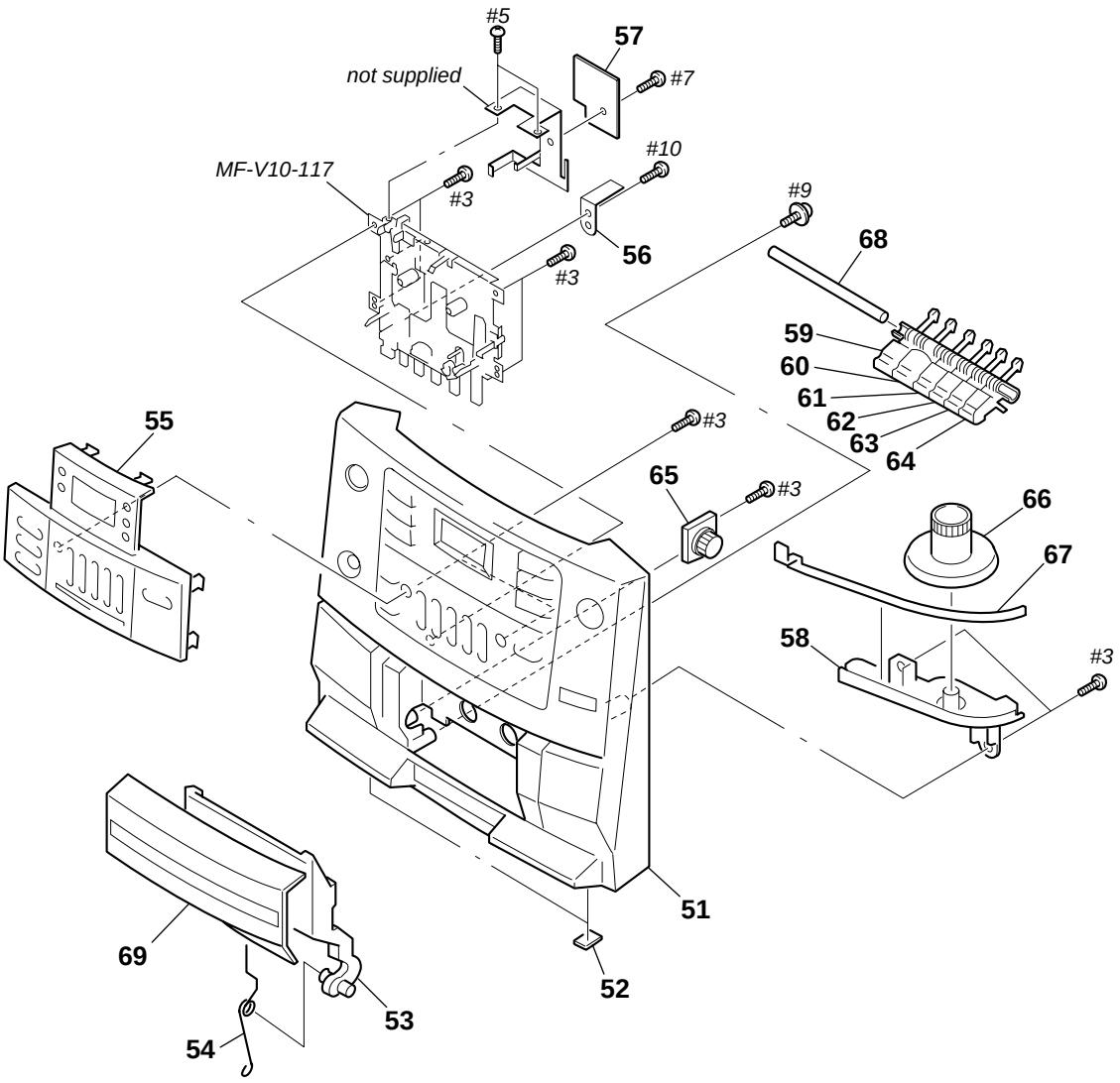
6-1. REAR CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	3-031-134-61	CABINET (REAR) (Z500:US)	
1	3-031-134-71	CABINET (REAR) (Z550:US)	
1	3-031-134-81	CABINET (REAR) (Canadian)	
1	3-229-109-01	CABINET (REAR) (Z501)	
2	3-031-182-01	RUBBER	
3	3-031-183-01	TERMINAL, ANTENNA	
* 4	1-673-232-11	BACK-UP BOARD	
* 5	1-673-228-11	POWER BOARD	
6	3-031-138-01	HANDLE (Z500, Z550)	
6	3-031-138-11	HANDLE (Z501)	
7	3-918-472-11	LID, BATTERY CASE (Z500, Z550)	
7	3-918-472-21	LID, BATTERY CASE (Z501)	

Ref. No.	Part No.	Description	Remark
* 8	1-673-229-11	BATTERY BOARD	
9	3-031-172-01	SPRING, BACK UP	
10	3-031-171-01	SPRING (-), BATTERY	
11	3-032-886-01	SPRING, BATTERY TERMINAL COIL	
12	4-981-789-11	BRACKET (2), YOKE	
13	3-831-441-99	CUSHION (B)	
14	4-889-836-01	CUSHION	
ANT1	1-501-383-21	ANTENNA, TELESCOPIC	
⚠F901	1-576-107-11	FUSE (3.15A/250V)	
⚠T901	1-431-230-11	TRANSFORMER, POWER (US)	
⚠T901	1-431-230-21	TRANSFORMER, POWER (Canadian)	

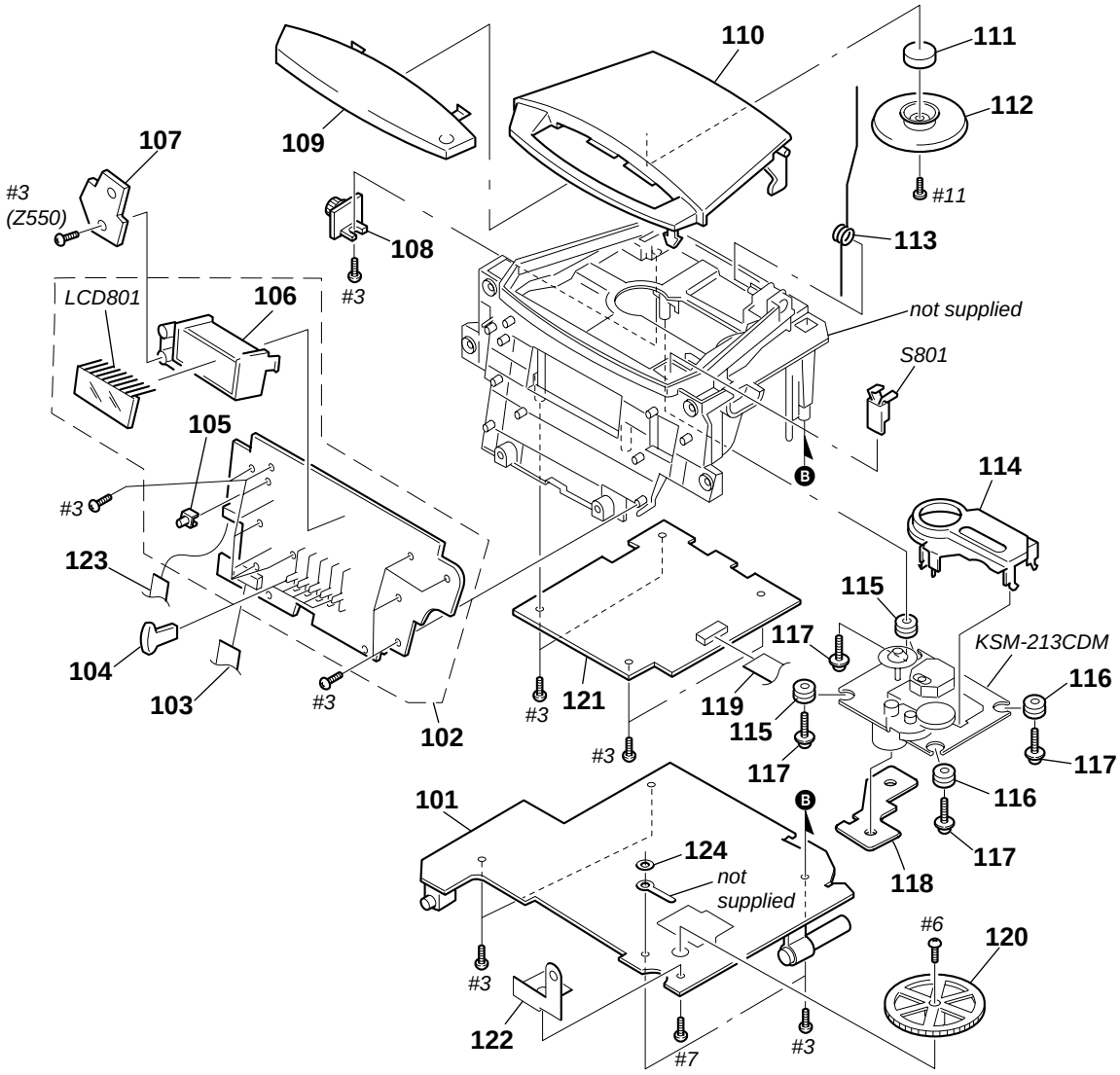
6-2. FRONT CABINET SECTION



Ref. No.	Part No.	Description	Remark
51	X-3377-060-1	CABINET (FRONT) SUB ASSY (Z500, Z550)	
51	X-3380-419-1	CABINET (FRONT) SUB ASSY (Z501)	
52	3-031-182-01	RUBBER	
53	3-034-019-01	HOLDER, CASSETTE (Z500, Z550)	
53	3-034-019-11	HOLDER, CASSETTE (Z501)	
54	3-034-025-01	SPRING, CASSETTE	
55	X-3377-061-1	PANEL ASSY, ORNAMENTAL (Z550)	
55	X-3377-062-1	PANEL ASSY, ORNAMENTAL (Z500)	
55	X-3380-418-1	PANEL ASSY, ORNAMENTAL (Z501)	
56	3-034-034-01	SPRING, REC	
* 57	1-673-230-11	REC SW BOARD	
58	3-034-013-01	CHASSIS, TUNING	
59	3-034-028-01	REC KNOB (Z500, Z550)	
59	3-034-028-11	REC KNOB (Z501)	
60	3-034-029-01	PLAY KNOB (Z500, Z550)	
60	3-034-029-11	PLAY KNOB (Z501)	

Ref. No.	Part No.	Description	Remark
61	3-034-030-01	KNOB (REW) (Z500, Z550)	
61	3-034-030-11	KNOB (REW) (Z501)	
62	3-034-031-01	KNOB (FF) (Z500, Z550)	
62	3-034-031-11	KNOB (FF) (Z501)	
63	3-034-032-01	KNOB (STOP/EJECT) (Z500/Z550)	
63	3-034-032-11	KNOB (STOP/EJECT) (Z501)	
64	3-034-033-01	PAUSE KNOB (Z500/Z550)	
64	3-034-033-11	PAUSE KNOB (Z501)	
65	3-922-112-31	DAMPER	
66	3-034-012-01	TUNING KNOB (Z500/Z550)	
66	3-034-012-11	TUNING KNOB (Z501)	
67	3-034-014-01	RACK, POINTER	
68	3-034-024-01	SHAFT, MD	
69	A-3320-929-A	CASSETTE LID ASSY (Z500/Z550)	
69	A-3364-666-A	CASSETTE LID ASSY (Z501)	

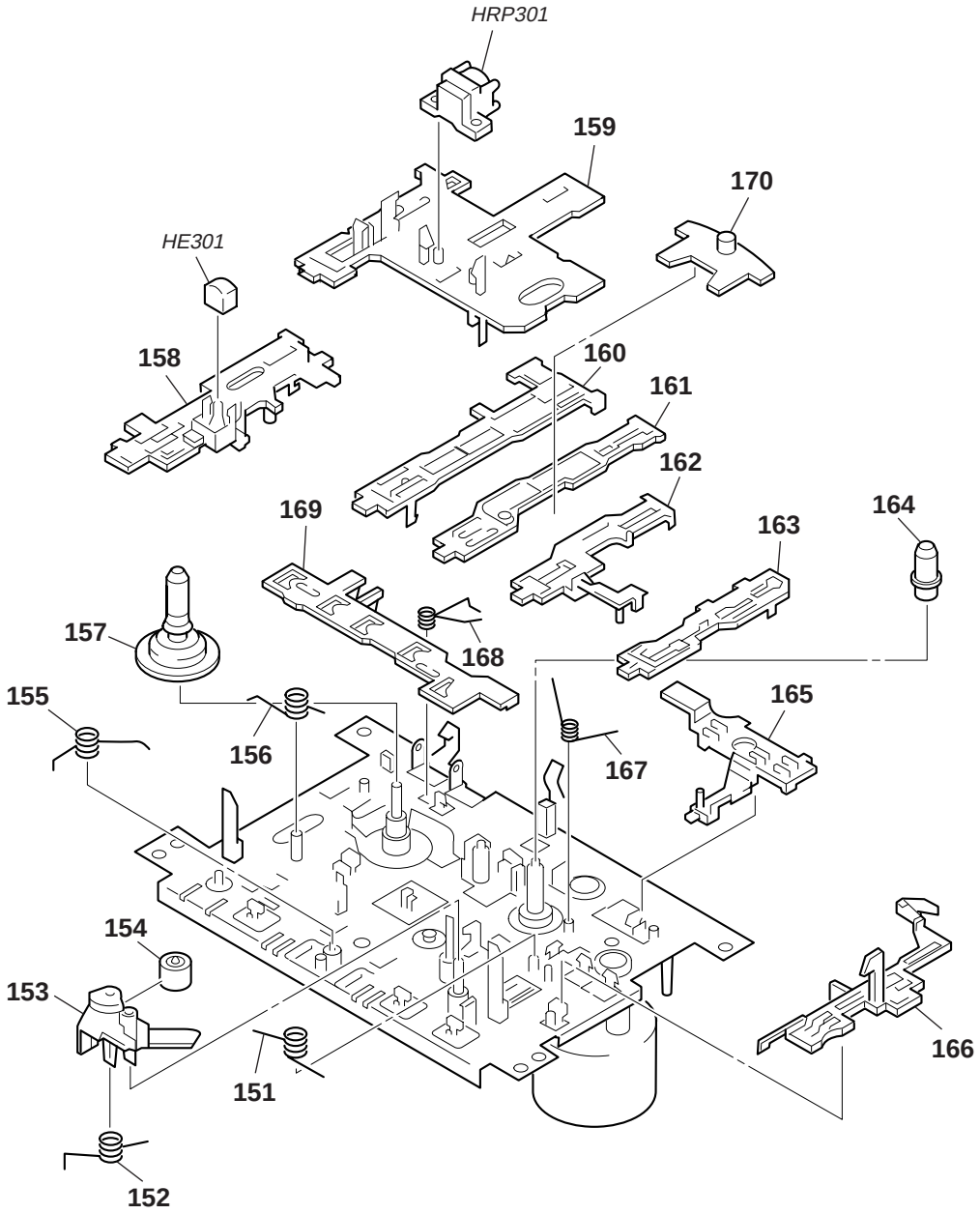
6-3. CD SECTION



Ref. No.	Part No.	Description	Remark
* 101	A-3323-221-A	MAIN BOARD, COMPLETE	
* 102	A-3321-832-A	CONTROL BOARD, COMPLETE (Z550)	
* 102	A-3321-838-A	CONTROL BOARD, COMPLETE (Z500, Z501)	
* 103	1-790-492-11	CABLE, FFC 25P	
104	3-034-016-01	KNOB (EQ) (Z500, Z550)	
104	3-034-016-11	KNOB (EQ) (Z501)	
105	3-032-953-01	HOLDER (LED C)	
106	3-034-023-01	HOLDER (LCD)	
* 107	1-673-231-11	SENSOR BOARD (Z550)	
108	3-922-112-31	DAMPER	
109	3-031-137-01	WINDOW, CD	
110	3-031-136-01	LID, CD (Z500, Z550)	
110	3-031-136-11	LID, CD (Z501)	
111	1-452-899-11	MAGNET	
112	3-021-020-01	PLATE, CHUCKING	

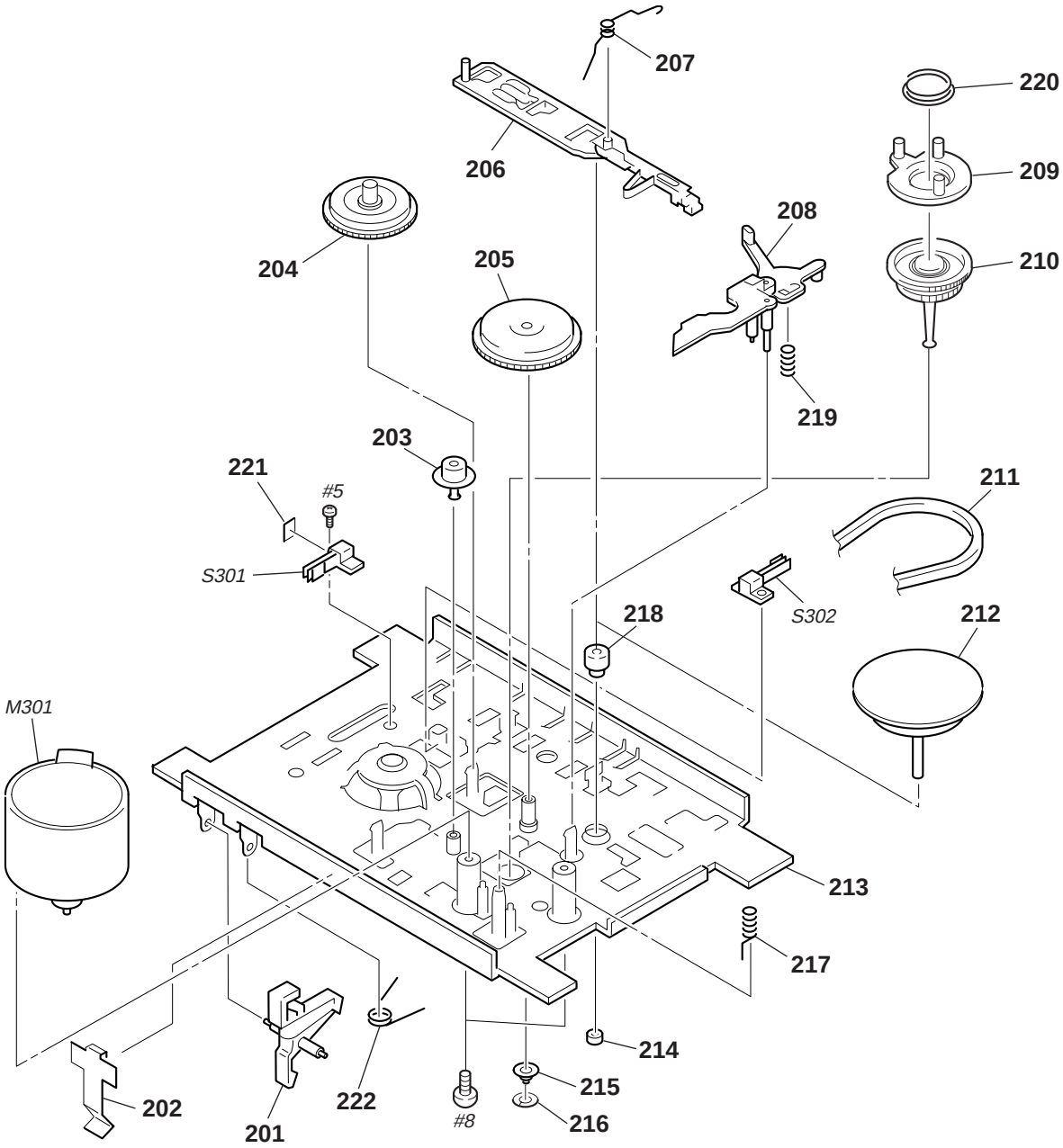
Ref. No.	Part No.	Description	Remark
113	3-031-173-01	SPRING, CD	
114	3-923-736-01	COVER, CD	
115	3-931-379-31	RUBBER, VIBRATION PROOF	
116	3-931-379-21	RUBBER, VIBRATION PROOF	
117	3-911-135-01	SCREW (2.6X10), (+PWH) TAPPING	
118	1-658-023-31	CD MOTOR BOARD	
119	1-790-242-11	CABLE, FFC 5P	
120	3-034-015-01	GEAR, TUNING CAPACITOR	
* 121	A-3321-831-A	CD BOARD, COMPLETE	
122	3-035-198-01	BRACKET (PWB)	
123	1-791-472-11	WIRE, PARALLEL (FFC) (10 CORE)	
124	3-370-910-31	WASHER	
LCD801	1-803-506-11	LCD	
S801	1-692-960-11	SWITCH, PUSH (1 KEY)	(CD DOOR OPEN/CLOSE)

6-4. TAPE MECHANISM DECK SECTION-1 (MF-Z500-117)



Ref. No.	Part No.	Description	Remark
151	3-933-010-01	SPRING (S/P), TORSION	
152	3-933-025-01	SPRING (P), TORSION	
153	3-933-026-01	LEVER (P)	
154	3-933-024-01	ROLLER, PINCH	
155	3-933-019-01	SPRING (F/R), TORSION	
156	3-933-028-01	SPRING (FWD), TORSION	
157	3-933-016-01	GEAR (S REEL)	
158	3-008-590-01	SLIDER (REC)	
159	3-008-592-01	BASE (H), HEAD	
* 160	3-008-588-01	SLIDER (REW)	
* 161	3-008-589-13	SLIDER (FF)	
* 162	3-008-587-01	SLIDER (STOP)	
* 163	3-008-591-01	SLIDER (PAUSE)	
164	3-933-004-01	CLAW, REEL	
* 165	3-933-021-01	SLIDER (FRP)	
* 166	3-933-006-01	SLIDER (EJECT)	
167	3-934-833-01	SPRING (FRP)	
168	3-022-794-02	SPRING (BT)	
169	3-933-007-01	PLATE, LOCK	
* 170	3-012-114-01	LEVER (FR)	
HE301	1-543-876-11	HEAD (ERASE)	
HRP301	1-500-454-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	

6-5. TAPE MECHANISM DECK SECTION-2 (MF-Z500-117)

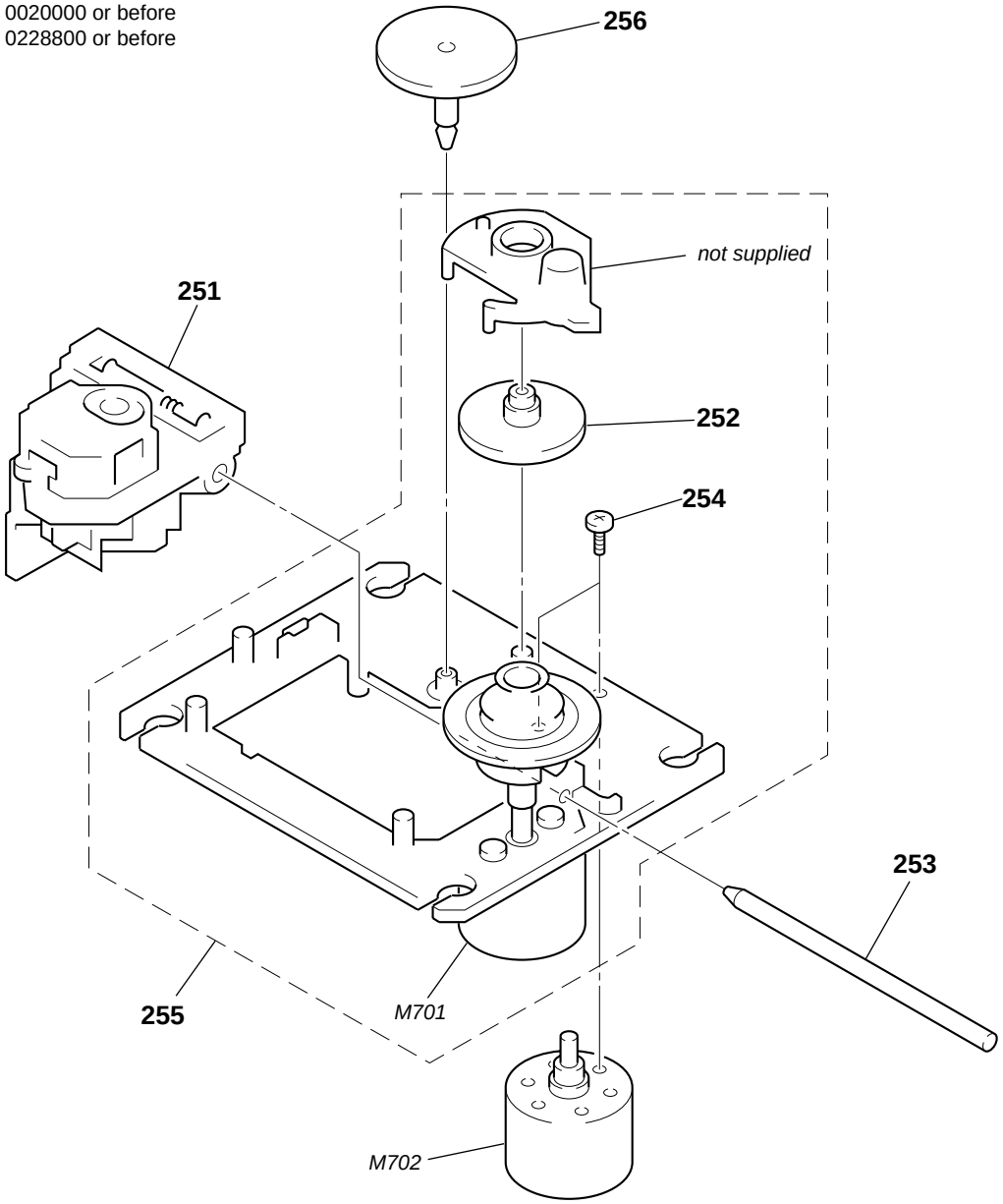


Ref. No.	Part No.	Description	Remark
201	3-933-029-01	LEVER, ERASING PREVENTION	
202	3-933-182-01	SPRING, CASSETTE	
203	3-932-995-01	GEAR (MID)	
204	X-3371-667-1	CLUTCH ASSY	
205	3-932-997-01	GEAR (CAM)	
* 206	3-932-999-01	SLIDER (SW)	
207	3-932-998-01	SPRING (GROUND), TORSION	
208	3-009-648-01	LEVER (S.OFF)	
209	3-936-438-01	LEVER (K)	
210	X-3373-572-1	REEL ASSY (N), T	
211	3-933-020-01	BELT	
212	X-3372-924-1	FLYWHEEL ASSY	
213	3-932-993-01	CHASSIS, OUTSERT	

Ref. No.	Part No.	Description	Remark
214	3-343-358-01	RING, RETAINING	
215	3-933-005-01	SPRING (CAM), COMPRESSION	
216	3-016-349-01	WASHER	
217	3-937-760-01	SPRING (GROUND), COMPRESSION	
218	3-934-336-01	BEARING	
219	3-939-383-02	SPRING, COMPRESSION	
220	3-009-650-02	SPRING (K), COMPRESSION	
221	3-320-454-01	SHEET	
222	3-023-780-01	SPRING	
M301	A-3320-446-A	MOTOR ASSY (CAPSTAN/REEL)	
S301	1-771-686-11	SWITCH, LEAF (TAPE PLAY)	
S302	1-762-679-11	SWITCH, LEAF (MOTOR ON/OFF)	

6-6. CD MECHANISM SECTION (KSM-213CDM)

Z500: Serial No. 2035000 or before
Z501: Serial No. 0020000 or before
Z550: Serial No. 0228800 or before



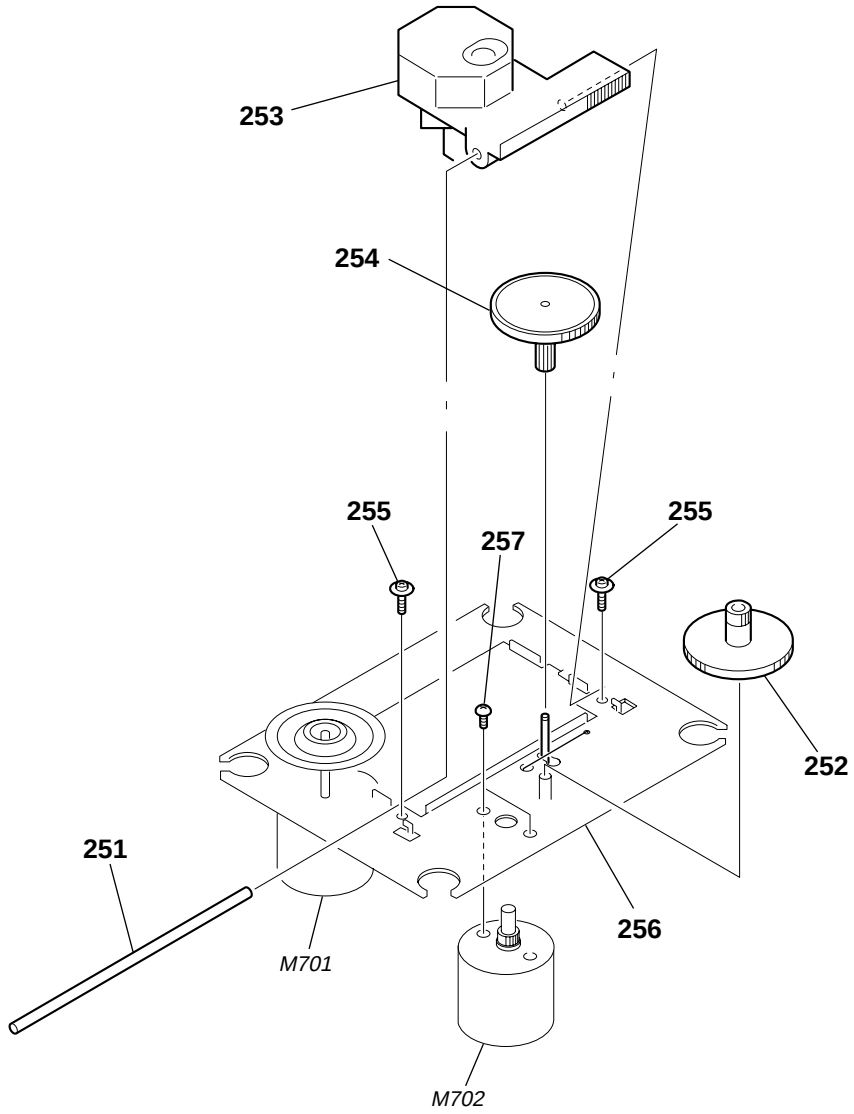
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠251	8-848-483-05	PICK-UP, OPTICAL KSS-213C	
252	2-627-003-02	GEAR (B) (RP)	
253	2-626-908-01	SHAFT, SLED	
254	3-713-786-51	SCREW +P 2X3	

Ref. No.	Part No.	Description	Remark
255	X-2626-202-1	CHASSIS ASSY (MB) (RP), MOTOR (SPINDLE) (INCLUDING M701)	
256	2-626-907-01	GEAR (A)	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	

6-7. CD MECHANISM SECTION (KSM-213RDM)

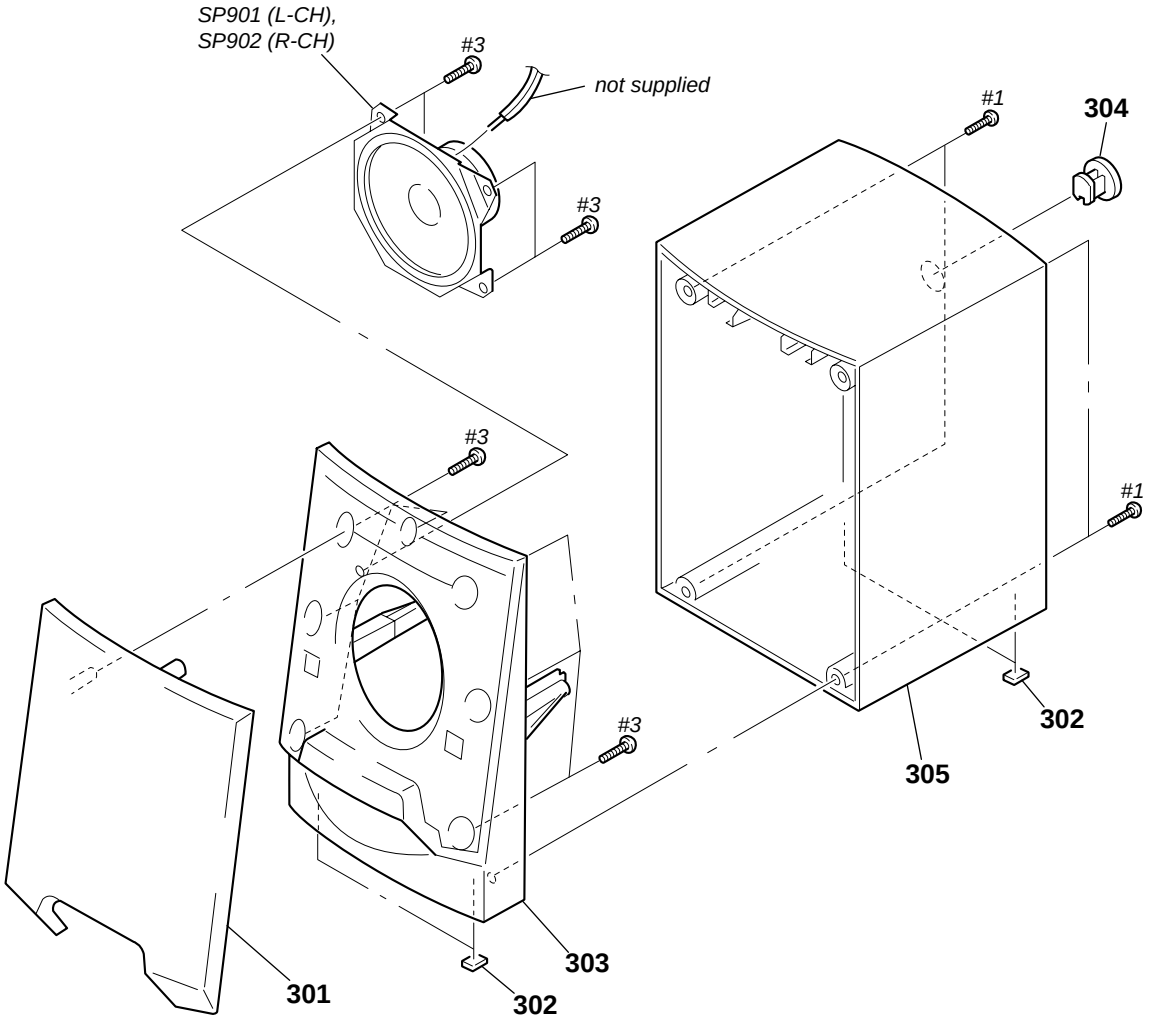
Z500: Serial No. 0235001 and later
Z501: Serial No. 0020001 and later
Z550: Serial No. 0228801 and later



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
251	2-626-908-01	SHAFT, SLED	
* 252	2-647-408-02	GEAR (B)	
⚠253	8-820-161-02	PICK-UP, OPTICAL KSS-213R/C2RP	
* 254	2-169-065-01	GEAR (A)	
255	2-169-388-01	TAPPING (M2), +PWB	
256	X-2162-704-1	CHASSIS ASSY (R) (RP), MOTOR (SPINDLE) (including M701)	
257	3-713-786-51	SCREW (M2X3)	
M702	X-2162-712-1	GEAR ASSY (R) (RP), MOTOR (SLED)	

6-8. SPEAKER SECTION



Ref. No.	Part No.	Description	Remark
301	X-3377-577-1	FRAME (NET) ASSY (Z500, Z550)	
301	X-3380-420-1	FRAME (NET) ASSY (Z501)	
302	3-031-182-11	RUBBER	
303	3-033-107-01	CABINET (FRONT), SPEAKER (Z500, Z550)	
303	3-033-107-21	CABINET (FRONT), SPEAKER (Z501)	
304	3-008-700-11	STOPPER, CORD (Z500, Z550)	
305	3-031-176-01	CABINET (REAR) (L), SPEAKER (Z500, Z550)	
305	3-031-176-11	CABINET (REAR) (L), SPEAKER (Z501)	
305	3-031-177-01	CABINET (REAR) (R), SPEAKER (Z500, Z550)	
305	3-031-177-11	CABINET (REAR) (R), SPEAKER (Z501)	
SP901	1-529-245-11	SPEAKER (10cm) (L-CH)	
SP902	1-529-245-11	SPEAKER (10cm) (R-CH)	

SECTION 7
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	1-673-232-11	BACK-UP BOARD			
		**********			
		< CONNECTOR >			
* CNP903	1-691-573-11	PIN, CONNECTOR (PC BOARD) 2P			
**********					
*	1-673-229-11	BATTERY BOARD			
		**********			
	3-031-171-01	SPRING (-), BATTERY			
	3-031-172-01	SPRING, BACK UP			
		< CONNECTOR >			
* CNP902	1-691-573-11	PIN, CONNECTOR (PC BOARD) 2P			
**********					
*	A-3321-831-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C702	1-162-306-11	CERAMIC	0.01uF	20%	16V
C703	1-162-305-11	CERAMIC	0.0068uF	20%	16V
C704	1-137-374-11	FILM	0.047uF	5%	50V
C705	1-162-306-11	CERAMIC	0.01uF	20%	16V
C706	1-124-443-00	ELECT	100uF	20%	10V
C707	1-130-487-00	MYLAR	0.022uF	5%	50V
C708	1-162-851-11	CERAMIC	0.1uF	10%	16V
C709	1-162-851-11	CERAMIC	0.1uF	10%	16V
C710	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C711	1-162-203-31	CERAMIC	15PF	5%	50V
C712	1-162-294-31	CERAMIC	0.001uF	10%	50V
C713	1-162-851-11	CERAMIC	0.1uF	10%	16V
C714	1-162-851-11	CERAMIC	0.1uF	10%	16V
C715	1-126-233-11	ELECT	22uF	20%	50V
C716	1-162-851-11	CERAMIC	0.1uF	10%	16V
C717	1-130-483-00	MYLAR	0.01uF	5%	50V
C718	1-131-377-00	TANTALUM	10uF	10%	10V
C719	1-104-664-11	ELECT	47uF	20%	10V
C720	1-162-306-11	CERAMIC	0.01uF	20%	16V
C721	1-130-489-00	MYLAR	0.033uF	5%	50V
C722	1-130-489-00	MYLAR	0.033uF	5%	50V
C723	1-162-306-11	CERAMIC	0.01uF	20%	16V
C724	1-130-489-00	MYLAR	0.033uF	5%	50V
C725	1-137-440-11	FILM	0.018uF	5%	50V

Ref. No.	Part No.	Description			Remark
C726	1-162-306-11	CERAMIC	0.01uF	20%	16V
C727	1-162-199-31	CERAMIC	10PF	5%	50V
C728	1-124-443-00	ELECT	100uF	20%	10V
C729	1-126-962-11	ELECT	3.3uF	20%	50V
C730	1-137-375-11	FILM	0.068uF	5%	50V
C731	1-162-215-31	CERAMIC	47PF	5%	50V
C732	1-162-306-11	CERAMIC	0.01uF	20%	16V
C733	1-162-306-11	CERAMIC	0.01uF	20%	16V
C734	1-162-282-31	CERAMIC	100PF	10%	50V
C735	1-162-306-11	CERAMIC	0.01uF	20%	16V
C737	1-162-294-31	CERAMIC	0.001uF	10%	50V
C739	1-162-282-31	CERAMIC	100PF	10%	50V
C741	1-161-053-00	CERAMIC	0.015uF	10%	50V
C742	1-162-306-11	CERAMIC	0.01uF	20%	16V
C743	1-162-294-31	CERAMIC	0.001uF	10%	50V
C744	1-124-472-11	ELECT	470uF	20%	10V
C745	1-124-443-00	ELECT	100uF	20%	10V
C746	1-162-282-31	CERAMIC	100PF	10%	50V
C747	1-162-282-31	CERAMIC	100PF	10%	50V
C749	1-162-306-11	CERAMIC	0.01uF	20%	16V
C750	1-162-306-11	CERAMIC	0.01uF	20%	16V
C751	1-162-306-11	CERAMIC	0.01uF	20%	16V
C752	1-162-306-11	CERAMIC	0.01uF	20%	16V
C753	1-124-443-00	ELECT	100uF	20%	10V
C755	1-162-306-11	CERAMIC	0.01uF	20%	16V
C756	1-162-306-11	CERAMIC	0.01uF	20%	16V
C757	1-124-443-00	ELECT	100uF	20%	10V
C758	1-162-306-11	CERAMIC	0.01uF	20%	16V
C759	1-124-443-00	ELECT	100uF	20%	10V
C760	1-137-194-81	FILM	0.47uF	5%	50V
C761	1-162-210-31	CERAMIC	30PF	5%	50V
C763	1-162-290-31	CERAMIC	470PF	10%	50V
C764	1-162-210-31	CERAMIC	30PF	5%	50V
C765	1-162-286-21	CERAMIC	220PF	10%	50V
C766	1-162-306-11	CERAMIC	0.01uF	20%	16V
C768	1-162-306-11	CERAMIC	0.01uF	20%	16V
C769	1-136-169-00	FILM	0.22uF	5%	50V
C771	1-162-282-31	CERAMIC	100PF	10%	50V
C773	1-124-443-00	ELECT	100uF	20%	10V
C775	1-162-306-11	CERAMIC	0.01uF	20%	16V
C776	1-162-294-31	CERAMIC	0.001uF	10%	50V
C777	1-162-306-11	CERAMIC	0.01uF	20%	16V
C780	1-162-284-31	CERAMIC	150PF	10%	50V
C781	1-162-292-31	CERAMIC	680PF	10%	50V
C782	1-126-963-11	ELECT	4.7uF	20%	50V

CD

Ref. No.	Part No.	Description			Remark
C790	1-162-284-31	CERAMIC	150PF	10%	50V
C791	1-162-292-31	CERAMIC	680PF	10%	50V
C792	1-126-963-11	ELECT	4.7uF	20%	50V
C794	1-162-282-31	CERAMIC	100PF	10%	50V
C795	1-162-282-31	CERAMIC	100PF	10%	50V
C796	1-164-159-21	CERAMIC	0.1uF		50V
C798	1-162-282-31	CERAMIC	100PF	10%	50V
		< CONNECTOR >			
CNP701	1-770-168-11	CONNECTOR, FFC/FPC 16P			
* CNP702	1-691-577-11	PIN, CONNECTOR (PC BOARD) 6P			
* CNP703	1-784-732-11	CONNECTOR, FFC 10P			
		< DIODE >			
D701	8-719-991-33	DIODE 1SS133T-77			
D702	8-719-991-33	DIODE 1SS133T-77			
D704	8-719-991-33	DIODE 1SS133T-77			
		< FERRITE BEAD >			
FB701	1-414-142-11	INDUCTOR	1uH		
FB702	1-414-137-31	INDUCTOR	0.22uH		
FB705	1-414-137-31	INDUCTOR	0.22uH		
		< IC >			
IC701	8-752-082-14	IC CXA1992BR			
IC702	8-759-473-42	IC BA6898FP			
IC703	8-752-384-13	IC CXD2589Q			
		< TRANSISTOR >			
Q701	8-729-037-02	TRANSISTOR KTA1266Y-AT			
		< RESISTOR >			
R701	1-249-440-11	CARBON	82K	5%	1/4W
R702	1-249-439-11	CARBON	68K	5%	1/4W
R703	1-249-439-11	CARBON	68K	5%	1/4W
R704	1-249-439-11	CARBON	68K	5%	1/4W
R705	1-249-439-11	CARBON	68K	5%	1/4W
R706	1-249-440-11	CARBON	82K	5%	1/4W
R707	1-247-887-00	CARBON	220K	5%	1/4W
R709	1-247-883-00	CARBON	150K	5%	1/4W
R710	1-247-885-00	CARBON	180K	5%	1/4W
R711	1-247-883-00	CARBON	150K	5%	1/4W
R712	1-247-891-00	CARBON	330K	5%	1/4W
R714	1-249-421-11	CARBON	2.2K	5%	1/4W
R715	1-249-429-11	CARBON	10K	5%	1/4W
R716	1-249-429-11	CARBON	10K	5%	1/4W
R717	1-247-903-00	CARBON	1M	5%	1/4W
R718	1-247-899-11	CARBON	680K	5%	1/4W
R719	1-249-393-11	CARBON	10	5%	1/4W
R720	1-249-430-11	CARBON	12K	5%	1/4W
R721	1-247-862-11	CARBON	20K	5%	1/4W
R722	1-247-886-11	CARBON	200K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R723	1-247-896-11	CARBON	510K	5%	1/4W
R724	1-249-439-11	CARBON	68K	5%	1/4W
R725	1-247-887-00	CARBON	220K	5%	1/4W
R726	1-247-883-00	CARBON	150K	5%	1/4W
R727	1-249-437-11	CARBON	47K	5%	1/4W
R728	1-249-441-11	CARBON	100K	5%	1/4W
R729	1-249-430-11	CARBON	12K	5%	1/4W
R730	1-249-435-11	CARBON	33K	5%	1/4W
R731	1-247-863-11	CARBON	22K	5%	1/4W
R733	1-249-417-11	CARBON	1K	5%	1/4W
R734	1-247-843-11	CARBON	3.3K	5%	1/4W
R735	1-249-427-11	CARBON	6.8K	5%	1/4W
R736	1-249-431-11	CARBON	15K	5%	1/4W
R738	1-249-435-11	CARBON	33K	5%	1/4W
R739	1-247-815-11	CARBON	220	5%	1/4W
R741	1-249-417-11	CARBON	1K	5%	1/4W
R742	1-249-417-11	CARBON	1K	5%	1/4W
R743	1-249-417-11	CARBON	1K	5%	1/4W
R744	1-249-417-11	CARBON	1K	5%	1/4W
R745	1-249-417-11	CARBON	1K	5%	1/4W
R746	1-249-417-11	CARBON	1K	5%	1/4W
R747	1-249-437-11	CARBON	47K	5%	1/4W
R748	1-249-417-11	CARBON	1K	5%	1/4W
R749	1-249-417-11	CARBON	1K	5%	1/4W
R750	1-247-863-11	CARBON	22K	5%	1/4W
R751	1-249-417-11	CARBON	1K	5%	1/4W
R752	1-249-417-11	CARBON	1K	5%	1/4W
R753	1-249-417-11	CARBON	1K	5%	1/4W
R755	1-249-417-11	CARBON	1K	5%	1/4W
R756	1-249-417-11	CARBON	1K	5%	1/4W
R757	1-249-417-11	CARBON	1K	5%	1/4W
R758	1-249-437-11	CARBON	47K	5%	1/4W
R759	1-249-437-11	CARBON	47K	5%	1/4W
R760	1-249-437-11	CARBON	47K	5%	1/4W
R764	1-247-843-11	CARBON	3.3K	5%	1/4W
R765	1-249-417-11	CARBON	1K	5%	1/4W
R766	1-249-429-11	CARBON	10K	5%	1/4W
R768	1-247-903-00	CARBON	1M	5%	1/4W
R771	1-249-429-11	CARBON	10K	5%	1/4W
R772	1-247-887-00	CARBON	220K	5%	1/4W
R780	1-249-430-11	CARBON	12K	5%	1/4W
R781	1-249-430-11	CARBON	12K	5%	1/4W
R782	1-249-430-11	CARBON	12K	5%	1/4W
R790	1-249-430-11	CARBON	12K	5%	1/4W
R791	1-249-430-11	CARBON	12K	5%	1/4W
R792	1-249-430-11	CARBON	12K	5%	1/4W
		< VIBRATOR >			
X701	1-577-253-11	VIBRATOR, CERAMIC (16.9344MHz)			

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Ref. No.	Part No.	Description			Remark
	1-658-023-31	CD MOTOR BOARD			
		**********			
		< CONNECTOR >			
CNP707	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< SWITCH >			
S701	1-572-085-11	SWITCH, LEAF (LIMIT)			
**********					
*	A-3321-832-A	CONTROL BOARD, COMPLETE (Z550)			
*	A-3321-838-A	CONTROL BOARD, COMPLETE (Z500, Z501)			
		**********			
	1-790-241-11	CABLE, FFC 11P			
*	1-790-492-11	CABLE, FFC 25P			
	3-032-953-01	HOLDER (LED C)			
	3-034-023-01	HOLDER (LCD)			
		< CAPACITOR >			
C801	1-124-443-00	ELECT	100uF	20%	10V
C802	1-164-159-21	CERAMIC	0.1uF		50V
C803	1-162-198-31	CERAMIC	8.2PF	10%	50V
C804	1-162-192-31	CERAMIC	2.7PF	10%	50V
C807	1-162-306-11	CERAMIC	0.01uF	30%	16V
C808	1-162-306-11	CERAMIC	0.01uF	30%	16V
C809	1-162-306-11	CERAMIC	0.01uF	30%	16V
C810	1-102-960-00	CERAMIC	24PF	5%	50V
C811	1-102-960-00	CERAMIC	24PF	5%	50V
C812	1-124-903-11	ELECT	1uF	20%	50V
C813	1-162-306-11	CERAMIC	0.01uF	30%	16V
C816	1-162-282-31	CERAMIC	100PF	10%	50V
C817	1-162-282-31	CERAMIC	100PF	10%	50V
C818	1-162-282-31	CERAMIC	100PF	10%	50V
C819	1-162-282-31	CERAMIC	100PF	10%	50V
C820	1-104-664-11	ELECT	47uF	20%	10V
C821	1-162-282-31	CERAMIC	100PF	10%	50V
C822	1-162-282-31	CERAMIC	100PF	10%	50V
C823	1-162-282-31	CERAMIC	100PF	10%	50V
C824	1-162-282-31	CERAMIC	100PF	10%	50V
C825	1-162-282-31	CERAMIC	100PF	10%	50V
C827	1-162-282-31	CERAMIC	100PF	10%	50V
C828	1-162-282-31	CERAMIC	100PF	10%	50V
C829	1-162-282-31	CERAMIC	100PF	10%	50V
C830	1-162-282-31	CERAMIC	100PF	10%	50V
C831	1-162-282-31	CERAMIC	100PF	10%	50V
C833	1-162-282-31	CERAMIC	100PF	10%	50V
C834	1-162-282-31	CERAMIC	100PF	10%	50V
C835	1-162-282-31	CERAMIC	100PF	10%	50V
C836	1-162-282-31	CERAMIC	100PF	10%	50V
C837	1-162-290-31	CERAMIC	470PF	10%	50V
C838	1-162-282-31	CERAMIC	100PF	10%	50V
C839	1-162-282-31	CERAMIC	100PF	10%	50V
C840	1-162-282-31	CERAMIC	100PF	10%	50V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
* CNP801	1-695-371-31	PIN, CONNECTOR (PC BOARD) 10P			
CNP802	1-784-747-11	CONNECTOR, FFC 25P			
* CNP803	1-695-104-11	PIN, CONNECTOR (PC BOARD) 2P			
		< DIODE >			
D801	8-719-059-97	LED L-34HD (OPR/BATT)			
D802	8-719-991-33	DIODE 1SS133T-77			
D803	8-719-991-33	DIODE 1SS133T-77			
D804	8-719-991-33	DIODE 1SS133T-77			
D805	8-719-991-33	DIODE 1SS133T-77			
D806	8-719-991-33	DIODE 1SS133T-77			
D807	8-719-991-33	DIODE 1SS133T-77			
D808	8-719-991-33	DIODE 1SS133T-77			
D809	8-719-991-33	DIODE 1SS133T-77			
D810	8-719-991-33	DIODE 1SS133T-77			
D811	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC801	8-752-905-51	IC CXP83620-008Q			
IC802	8-759-165-86	IC PST600I-T			
IC804	8-759-179-74	IC M62354P			
		< COIL >			
L801	1-410-171-11	INDUCTOR 1mH			
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-803-506-11	LCD			
		< TRANSISTOR >			
Q801	8-729-036-89	TRANSISTOR KTC3198GR-AT			
		< RESISTOR >			
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-417-11	CARBON	1K	5%	1/4W
R803	1-249-417-11	CARBON	1K	5%	1/4W
R804	1-249-417-11	CARBON	1K	5%	1/4W
R805	1-249-417-11	CARBON	1K	5%	1/4W
R806	1-249-417-11	CARBON	1K	5%	1/4W
R807	1-249-417-11	CARBON	1K	5%	1/4W
R808	1-249-417-11	CARBON	1K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R810	1-249-417-11	CARBON	1K	5%	1/4W
R811	1-249-417-11	CARBON	1K	5%	1/4W
R812	1-249-417-11	CARBON	1K	5%	1/4W
R814	1-249-425-11	CARBON	4.7K	5%	1/4W
R816	1-249-417-11	CARBON	1K	5%	1/4W
R817	1-249-417-11	CARBON	1K	5%	1/4W
R818	1-249-417-11	CARBON	1K	5%	1/4W
R819	1-249-425-11	CARBON	4.7K	5%	1/4W
R820	1-249-415-11	CARBON	680	5%	1/4W

CONTROL

Ref. No.	Part No.	Description			Remark
R821	1-249-413-11	CARBON	470	5%	1/4W
R822	1-249-437-11	CARBON	47K	5%	1/4W
R823	1-249-417-11	CARBON	1K	5%	1/4W
R824	1-249-417-11	CARBON	1K	5%	1/4W
R825	1-249-417-11	CARBON	1K	5%	1/4W
R826	1-249-425-11	CARBON	4.7K	5%	1/4W
R827	1-249-425-11	CARBON	4.7K	5%	1/4W
R828	1-249-425-11	CARBON	4.7K	5%	1/4W
R829	1-249-425-11	CARBON	4.7K	5%	1/4W
R830	1-249-417-11	CARBON	1K	5%	1/4W
R831	1-247-883-00	CARBON	150K	5%	1/4W
R832	1-249-439-11	CARBON	68K	5%	1/4W
R833	1-249-439-11	CARBON	68K	5%	1/4W
R834	1-249-439-11	CARBON	68K	5%	1/4W
R835	1-249-417-11	CARBON	1K	5%	1/4W
R836	1-249-425-11	CARBON	4.7K	5%	1/4W
R837	1-249-417-11	CARBON	1K	5%	1/4W
R838	1-249-429-11	CARBON	10K	5%	1/4W
R839	1-249-425-11	CARBON	4.7K	5%	1/4W
R840	1-249-425-11	CARBON	4.7K	5%	1/4W
R841	1-249-429-11	CARBON	10K	5%	1/4W
R842	1-249-417-11	CARBON	1K	5%	1/4W
R844	1-249-429-11	CARBON	10K	5%	1/4W
R845	1-249-442-11	CARBON	510	5%	1/4W
R846	1-249-413-11	CARBON	470	5%	1/4W
R847	1-249-412-11	CARBON	390	5%	1/4W
R848	1-249-413-11	CARBON	470	5%	1/4W
R849	1-247-843-11	CARBON	3.3K	5%	1/4W
R850	1-247-843-11	CARBON	3.3K	5%	1/4W
R851	1-249-427-11	CARBON	6.8K	5%	1/4W
R852	1-249-432-11	CARBON	18K	5%	1/4W
R853	1-249-413-11	CARBON	470	5%	1/4W
R854	1-249-412-11	CARBON	390	5%	1/4W
R855	1-249-413-11	CARBON	470	5%	1/4W
R856	1-247-843-11	CARBON	3.3K	5%	1/4W
R857	1-247-843-11	CARBON	3.3K	5%	1/4W
R858	1-249-413-11	CARBON	470	5%	1/4W
R859	1-249-412-11	CARBON	390	5%	1/4W
R860	1-249-413-11	CARBON	470	5%	1/4W
R861	1-247-843-11	CARBON	3.3K	5%	1/4W
R862	1-247-843-11	CARBON	3.3K	5%	1/4W
R863	1-249-427-11	CARBON	6.8K	5%	1/4W
R864	1-247-895-11	CARBON	470K	5%	1/4W
R865	1-249-429-11	CARBON	10K	5%	1/4W
R866	1-249-441-11	CARBON	100K	5%	1/4W
R867	1-249-429-11	CARBON	10K	5%	1/4W
R868	1-249-429-11	CARBON	10K	5%	1/4W
R869	1-249-417-11	CARBON	1K	5%	1/4W
R870	1-249-417-11	CARBON	1K	5%	1/4W
R871	1-249-417-11	CARBON	1K	5%	1/4W
R872	1-249-417-11	CARBON	1K	5%	1/4W
R873	1-249-417-11	CARBON	1K	5%	1/4W
R874	1-249-417-11	CARBON	1K	5%	1/4W
R875	1-249-429-11	CARBON	10K	5%	1/4W
R876	1-249-429-11	CARBON	10K	5%	1/4W
R877	1-249-429-11	CARBON	10K	5%	1/4W
R878	1-249-401-11	CARBON	47	5%	1/4W
R879	1-249-429-11	CARBON	10K	5%	1/4W
R880	1-249-429-11	CARBON	10K	5%	1/4W
R881	1-249-429-11	CARBON	10K	5%	1/4W
R882	1-249-429-11	CARBON	10K	5%	1/4W
R883	1-249-429-11	CARBON	10K	5%	1/4W
R884	1-249-429-11	CARBON	10K	5%	1/4W
R885	1-249-429-11	CARBON	10K	5%	1/4W
R886	1-249-429-11	CARBON	10K	5%	1/4W
R887	1-249-429-11	CARBON	10K	5%	1/4W
R888	1-249-429-11	CARBON	10K	5%	1/4W
R889	1-249-437-11	CARBON	47K	5%	1/4W
R890	1-249-429-11	CARBON	10K	5%	1/4W
R891	1-249-417-11	CARBON	1K	5%	1/4W
R892	1-249-417-11	CARBON	1K	5%	1/4W
R893	1-249-417-11	CARBON	1K	5%	1/4W
R894	1-249-435-11	CARBON	33K	5%	1/4W
R895	1-249-437-11	CARBON	47K	5%	1/4W
R896	1-249-428-11	CARBON	8.2K	5%	1/4W
R897	1-249-429-11	CARBON	10K	5%	1/4W

< VOLUME >

RV801	1-225-773-11	VOLUME, SLIDE (NON-CLICK) 50K (MEGA BASS)
RV802	1-225-772-11	VOLUME, SLIDE (CLICK) 50K (400Hz)
RV803	1-225-772-11	VOLUME, SLIDE (CLICK) 50K (1kHz)
RV804	1-225-772-11	VOLUME, SLIDE (CLICK) 50K (4kHz)
RV805	1-225-772-11	VOLUME, SLIDE (CLICK) 50K (10kHz)

< SWITCH >

S801	1-762-798-11	SWITCH, KEY BOARD (TIMER)
S802	1-762-798-11	SWITCH, KEY BOARD (STANDBY)
S803	1-762-798-11	SWITCH, KEY BOARD (FLASH)
S804	1-762-798-11	SWITCH, KEY BOARD (LOOP)
S805	1-762-798-11	SWITCH, KEY BOARD (SOUND)
S806	1-762-798-11	SWITCH, KEY BOARD (VOLUME –)
S807	1-762-798-11	SWITCH, KEY BOARD (VOLUME +)
S809	1-762-798-11	SWITCH, KEY BOARD (SLEEP)
S810	1-762-798-11	SWITCH, KEY BOARD (CLOCK)
S811	1-762-798-11	SWITCH, KEY BOARD (► II)
S812	1-762-798-11	SWITCH, KEY BOARD (■)
S813	1-762-798-11	SWITCH, KEY BOARD (I◄◄ – (TIME SET))
S814	1-762-798-11	SWITCH, KEY BOARD (►►I + (TIME SET))
S815	1-762-798-11	SWITCH, KEY BOARD (POWER)
S816	1-762-798-11	SWITCH, KEY BOARD (CD)
S817	1-762-798-11	SWITCH, KEY BOARD (RADIO BAND)
S818	1-762-798-11	SWITCH, KEY BOARD (TAPE)
S819	1-762-798-11	SWITCH, KEY BOARD (DISPLAY ENTER)
S820	1-762-798-11	SWITCH, KEY BOARD (MODE)

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X801	1-767-184-11	VIBRATOR, CERAMIC (4.19MHz)			
X802	1-781-338-11	OSCILLATOR (150kHz)			
**********					
*	A-3323-221-A	MAIN BOARD, COMPLETE			
		**********			
	1-533-233-31	HOLDER, FUSE (for ANTENNA)			
	3-034-015-01	GEAR, TUNING CAPACITOR			
	3-035-198-01	BRACKET (PWB)			
	7-621-770-87	SCREW +B 2.6X5			
	7-682-147-01	SCREW +P 3X6			
	7-685-645-79	SCREW +P 3X6 TYPE2 NON-SLIT			
		< CAPACITOR >			
C1	1-162-294-31	CERAMIC	0.001uF	10%	50V
C2	1-162-306-11	CERAMIC	0.01uF	30%	16V
C3	1-104-664-11	ELECT	47uF	20%	10V
C5	1-162-205-31	CERAMIC	18PF	5%	50V
C6	1-102-960-00	CERAMIC	24PF	5%	50V
C7	1-102-942-00	CERAMIC	5PF	0.5PF	50V
C8	1-162-222-31	CERAMIC	1.5PF	20%	50V
C9	1-162-306-11	CERAMIC	0.01uF	30%	16V
C10	1-162-306-11	CERAMIC	0.01uF	30%	16V
C11	1-126-963-11	ELECT	4.7uF	20%	50V
C12	1-124-903-11	ELECT	1uF	20%	50V
C13	1-104-664-11	ELECT	47uF	20%	10V
C14	1-104-664-11	ELECT	47uF	20%	10V
C15	1-162-306-11	CERAMIC	0.01uF	30%	16V
C16	1-126-961-11	ELECT	2.2uF	20%	50V
C17	1-124-907-11	ELECT	10uF	20%	50V
C18	1-161-053-00	CERAMIC	0.015uF	10%	50V
C19	1-161-053-00	CERAMIC	0.015uF	10%	50V
C21	1-162-205-31	CERAMIC	18PF	5%	50V
C22	1-124-903-11	ELECT	1uF	20%	50V
C23	1-124-902-00	ELECT	0.47uF	20%	50V
C24	1-126-963-11	ELECT	4.7uF	20%	50V
C25	1-162-294-31	CERAMIC	0.001uF	10%	50V
C28	1-162-306-11	CERAMIC	0.01uF	30%	16V
C29	1-161-494-00	CERAMIC	0.022uF		25V
C30	1-124-902-00	ELECT	0.47uF	20%	50V
C31	1-124-902-00	ELECT	0.47uF	20%	50V
C32	1-162-306-11	CERAMIC	0.01uF	30%	16V
C101	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C102	1-161-020-11	CERAMIC	0.039uF	10%	16V
C103	1-104-664-11	ELECT	47uF	20%	10V
C104	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C105	1-124-902-00	ELECT	0.47uF	20%	50V
C106	1-162-282-31	CERAMIC	100PF	10%	50V
C107	1-124-907-11	ELECT	10uF	20%	50V
C108	1-162-215-31	CERAMIC	47PF	5%	50V
C109	1-162-294-31	CERAMIC	0.001uF	10%	50V
C110	1-126-963-11	ELECT	4.7uF	20%	50V
C111	1-124-903-11	ELECT	1uF	20%	50V
C112	1-162-282-31	CERAMIC	100PF	10%	50V
C113	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C114	1-104-664-11	ELECT	47uF	20%	10V
C115	1-104-665-11	ELECT	100uF	20%	16V
C116	1-124-473-11	ELECT	1000uF	20%	10V
C117	1-130-495-00	MYLAR	0.1uF	5%	50V
C118	1-124-907-11	ELECT	10uF	20%	50V
C120	1-124-903-11	ELECT	1uF	20%	50V
C130	1-162-282-31	CERAMIC	100PF	10%	50V
C201	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C202	1-161-020-11	CERAMIC	0.039uF	10%	16V
C203	1-104-664-11	ELECT	47uF	20%	10V
C204	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C205	1-124-902-00	ELECT	0.47uF	20%	50V
C206	1-162-282-31	CERAMIC	100PF	10%	50V
C207	1-124-907-11	ELECT	10uF	20%	50V
C208	1-162-215-31	CERAMIC	47PF	5%	50V
C209	1-162-294-31	CERAMIC	0.001uF	10%	50V
C210	1-126-963-11	ELECT	4.7uF	20%	50V
C211	1-124-903-11	ELECT	1uF	20%	50V
C212	1-162-282-31	CERAMIC	100PF	10%	50V
C213	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C214	1-104-664-11	ELECT	47uF	20%	10V
C215	1-104-665-11	ELECT	100uF	20%	16V
C216	1-124-473-11	ELECT	1000uF	20%	10V
C217	1-130-495-00	MYLAR	0.1uF	5%	50V
C218	1-124-907-11	ELECT	10uF	20%	50V
C220	1-124-903-11	ELECT	1uF	20%	50V
C230	1-162-282-31	CERAMIC	100PF	10%	50V
C301	1-104-666-11	ELECT	220uF	20%	10V
C302	1-104-663-11	ELECT	33uF	20%	16V
C304	1-124-907-11	ELECT	10uF	20%	50V
C305	1-124-907-11	ELECT	10uF	20%	50V
C306	1-104-666-11	ELECT	220uF	20%	10V
C307	1-162-282-31	CERAMIC	100PF	10%	50V
C308	1-130-481-00	MYLAR	0.0068uF	5%	50V
C309	1-104-664-11	ELECT	47uF	20%	10V
C311	1-162-294-31	CERAMIC	0.001uF	10%	50V
C312	1-104-666-11	ELECT	220uF	20%	10V
C313	1-162-306-11	CERAMIC	0.01uF	30%	16V
C314	1-162-306-11	CERAMIC	0.01uF	30%	16V
C315	1-124-443-00	ELECT	100uF	20%	10V
C316	1-104-666-11	ELECT	220uF	20%	10V
C317	1-162-306-11	CERAMIC	0.01uF	30%	16V
C318	1-162-306-11	CERAMIC	0.01uF	30%	16V
C319	1-162-282-31	CERAMIC	100PF	10%	50V
C320	1-162-282-31	CERAMIC	100PF	10%	50V
C321	1-162-282-31	CERAMIC	100PF	10%	50V
C323	1-124-898-11	ELECT	4700uF	20%	16V
C326	1-162-851-11	CERAMIC	0.1uF	10%	16V
C327	1-124-903-11	ELECT	1uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C329	1-124-907-11	ELECT	10uF	20%	50V
C331	1-126-963-11	ELECT	4.7uF	20%	50V
C332	1-162-282-31	CERAMIC	100PF	10%	50V
C333	1-126-233-11	ELECT	22uF	20%	50V
C339	1-104-666-11	ELECT	220uF	20%	16V
C340	1-124-443-00	ELECT	100uF	20%	10V
C341	1-162-843-11	CERAMIC	0.022uF	10%	16V
C342	1-126-963-11	ELECT	4.7uF	20%	50V
C343	1-124-903-11	ELECT	1uF	20%	50V
C344	1-104-664-11	ELECT	47uF	20%	10V
C345	1-104-666-11	ELECT	220uF	20%	10V
C348	1-164-159-21	CERAMIC	0.1uF		50V
C349	1-164-159-21	CERAMIC	0.1uF		50V
C355	1-124-903-11	ELECT	1uF	20%	50V
C356	1-124-903-11	ELECT	1uF	20%	50V
C357	1-124-903-11	ELECT	1uF	20%	50V
C358	1-124-903-11	ELECT	1uF	20%	50V
C359	1-124-903-11	ELECT	1uF	20%	50V
		< FILTER >			
CF1	1-760-738-61	FILTER, CERAMIC			
CF2	1-577-072-11	FILTER, CERAMIC			
		< CONNECTOR >			
CNP301	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
* CNP302	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P			
* CNP303	1-580-158-11	PIN, CONNECTOR (PC BOARD) 6P			
CNP304	1-784-786-11	CONNECTOR, FFC 25P			
CNP306	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
		< VARIABLE CAPACITOR >			
CT1	1-151-696-11	CAP, VAR			
CV1	1-151-696-11	CAP, VAR (TUNING)			
		< DIODE >			
D1	8-719-991-33	DIODE 1SS133T-77			
D2	8-719-991-33	DIODE 1SS133T-77			
D3	8-719-991-33	DIODE 1SS133T-77			
D301	8-719-109-89	DIODE RD5.6ESB2			
D302	8-719-109-97	DIODE RD6.8ES-B2			
D304	8-719-991-33	DIODE 1SS133T-77			
D305	8-719-991-33	DIODE 1SS133T-77			
D314	8-719-991-33	DIODE 1SS133T-77			
D315	8-719-991-33	DIODE 1SS133T-77			
D326	8-719-991-33	DIODE 1SS133T-77			
D327	8-719-991-33	DIODE 1SS133T-77			
D328	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC1	8-752-050-20	IC XA1238S			
IC301	8-759-264-71	IC TA2068N			
IC302	8-752-067-34	IC CXA1352AS			
IC304	8-759-426-51	IC BA5417			

Ref. No.	Part No.	Description			Remark
IC305	8-759-479-70	IC S-81250SGY-B			
		< JACK >			
J301	1-537-330-11	TERMINAL BOARD (SPEAKER)			
J302	1-779-050-11	JACK (PHONES)			
		< COIL >			
L1	1-406-998-11	COIL, AIR-CORE			
L2	1-411-387-11	COIL, AIR-CORE			
L3	1-501-841-11	ANTENNA, FERRITE-ROD (AM)			
L4	1-406-464-51	COIL (OSC)			
L301	1-410-324-11	INDUCTOR	4.7uH		
L302	1-414-142-11	INDUCTOR	1uH		
		< TRANSISTOR >			
Q1	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q101	8-729-036-80	TRANSISTOR	KRC110M		
Q201	8-729-036-80	TRANSISTOR	KRC110M		
Q301	8-729-037-17	TRANSISTOR	KRA104M-AT		
Q302	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
Q303	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q304	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q305	8-729-209-15	TRANSISTOR	2SD2012		
Q306	8-729-209-15	TRANSISTOR	2SD2012		
Q307	8-729-037-17	TRANSISTOR	KRA104M-AT		
Q308	8-729-037-17	TRANSISTOR	KRA104M-AT		
Q309	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q313	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
Q316	8-729-037-13	TRANSISTOR	KTA1271Y		
Q317	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q318	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q320	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
Q321	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q322	8-729-037-29	TRANSISTOR	KRA102M		
Q325	8-729-036-89	TRANSISTOR	KTC3198GR-AT		
		< RESISTOR >			
R1	1-247-815-11	CARBON	220	5%	1/4W
R2	1-249-421-11	CARBON	2.2K	5%	1/4W
R3	1-249-441-11	CARBON	100K	5%	1/4W
R4	1-247-843-11	CARBON	3.3K	5%	1/4W
R5	1-249-417-11	CARBON	1K	5%	1/4W
R6	1-249-403-11	CARBON	68	5%	1/4W
R7	1-249-427-11	CARBON	6.8K	5%	1/4W
R8	1-249-427-11	CARBON	6.8K	5%	1/4W
R9	1-249-418-11	CARBON	1.2K	5%	1/4W
R10	1-249-418-11	CARBON	1.2K	5%	1/4W
R13	1-249-421-11	CARBON	2.2K	5%	1/4W
R15	1-249-429-11	CARBON	10K	5%	1/4W
R16	1-249-424-11	CARBON	3.9K	5%	1/4W
R101	1-249-432-11	CARBON	18K	5%	1/4W
R102	1-249-403-11	CARBON	68	5%	1/4W

Ref. No.	Part No.	Description			Remark
R103	1-249-440-11	CARBON	82K	5%	1/4W
R104	1-247-843-11	CARBON	3.3K	5%	1/4W
R105	1-249-432-11	CARBON	18K	5%	1/4W
R106	1-249-425-11	CARBON	4.7K	5%	1/4W
R107	1-249-418-11	CARBON	1.2K	5%	1/4W
R108	1-249-419-11	CARBON	1.5K	5%	1/4W
R109	1-249-425-11	CARBON	4.7K	5%	1/4W
R110	1-249-416-11	CARBON	820	5%	1/4W
R111	1-249-406-11	CARBON	120	5%	1/4W
R112	1-249-385-11	CARBON	2.2	5%	1/6W
R113	1-249-404-00	CARBON	82	5%	1/4W
R114	1-249-429-11	CARBON	10K	5%	1/4W
R120	1-247-807-11	CARBON	100	5%	1/4W
R201	1-249-432-11	CARBON	18K	5%	1/4W
R202	1-249-403-11	CARBON	68	5%	1/4W
R203	1-249-440-11	CARBON	82K	5%	1/4W
R204	1-247-843-11	CARBON	3.3K	5%	1/4W
R205	1-249-432-11	CARBON	18K	5%	1/4W
R206	1-249-425-11	CARBON	4.7K	5%	1/4W
R207	1-249-418-11	CARBON	1.2K	5%	1/4W
R208	1-249-419-11	CARBON	1.5K	5%	1/4W
R209	1-249-425-11	CARBON	4.7K	5%	1/4W
R210	1-249-416-11	CARBON	820	5%	1/4W
R211	1-249-406-11	CARBON	120	5%	1/4W
R212	1-249-385-11	CARBON	2.2	5%	1/6W
R213	1-249-404-00	CARBON	82	5%	1/4W
R214	1-249-429-11	CARBON	10K	5%	1/4W
R220	1-247-807-11	CARBON	100	5%	1/4W
R301	1-247-903-00	CARBON	1M	5%	1/4W
R302	1-249-429-11	CARBON	10K	5%	1/4W
R303	1-249-429-11	CARBON	10K	5%	1/4W
R304	1-249-429-11	CARBON	10K	5%	1/4W
R306	1-247-863-11	CARBON	22K	5%	1/4W
R307	1-249-393-11	CARBON	10	5%	1/4W
R308	1-249-437-11	CARBON	47K	5%	1/4W
R309	1-249-425-11	CARBON	4.7K	5%	1/4W
⚠R310	1-212-934-00	FUSIBLE	1	5%	1/2W F
R311	1-247-807-11	CARBON	100	5%	1/4W
R312	1-249-421-11	CARBON	2.2K	5%	1/4W
R313	1-249-419-11	CARBON	1.5K	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-418-11	CARBON	1.2K	5%	1/4W
R316	1-247-899-11	CARBON	680K	5%	1/4W
R317	1-249-407-11	CARBON	150	5%	1/4W
R318	1-247-889-00	CARBON	270K	5%	1/4W
R319	1-247-807-11	CARBON	100	5%	1/4W
R320	1-249-407-11	CARBON	150	5%	1/4W
R321	1-249-404-00	CARBON	82	5%	1/4W
R323	1-247-815-11	CARBON	220	5%	1/4W
R326	1-249-437-11	CARBON	47K	5%	1/4W
R327	1-249-432-11	CARBON	18K	5%	1/4W
R328	1-249-437-11	CARBON	47K	5%	1/4W
R329	1-249-432-11	CARBON	18K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R338	1-247-884-11	CARBON	160K	5%	1/4W
R339	1-249-437-11	CARBON	47K	5%	1/4W
R340	1-249-425-11	CARBON	4.7K	5%	1/4W
R341	1-249-429-11	CARBON	10K	5%	1/4W
R342	1-249-417-11	CARBON	1K	5%	1/4W
R350	1-249-441-11	CARBON	100K	5%	1/4W
R355	1-249-401-11	CARBON	47	5%	1/4W
R356	1-249-417-11	CARBON	1K	5%	1/4W
R359	1-249-435-11	CARBON	33K	5%	1/4W
R360	1-249-429-11	CARBON	10K	5%	1/4W
R361	1-247-791-11	CARBON	22	5%	1/4W
R366	1-247-863-11	CARBON	22K	5%	1/4W
R367	1-249-437-11	CARBON	47K	5%	1/4W
R368	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV1	1-228-994-00	RES, ADJ, METAL 10K			
		< TRANSFORMER >			
T1	1-409-944-11	COIL (DET)			
T2	1-416-522-11	COIL (IFT)			
T301	1-416-041-11	TRANSFORMER, BIAS OSCILLATION			
**********					
*	1-673-228-11	POWER BOARD			
		**********			
	1-533-233-31	HOLDER, FUSE			
		< CAPACITOR >			
C901	1-161-055-00	CERAMIC	0.022uF	10%	50V
C902	1-161-055-00	CERAMIC	0.022uF	10%	50V
C903	1-161-055-00	CERAMIC	0.022uF	10%	50V
C904	1-161-055-00	CERAMIC	0.022uF	10%	50V
C905	1-161-055-00	CERAMIC	0.022uF	10%	50V
		< CONNECTOR >			
* CNP901	1-695-107-11	PIN, CONNECTOR (PC BOARD) 5P			
		< DIODE >			
D901	8-719-971-26	DIODE IN4002			
D902	8-719-971-26	DIODE IN4002			
D903	8-719-971-26	DIODE IN4002			
D904	8-719-971-26	DIODE IN4002			
D906	8-719-991-33	DIODE 1SS133T-77			
D907	8-719-981-95	DIODE MTZJ-2.7B			
D908	8-719-986-73	DIODE RB441Q			
		< FUSE >			
⚠F901	1-576-107-11	FUSE (3.15A/250V)			
		< AC INLET >			
⚠J901	1-540-009-11	INLET, AC (~ AC IN)			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ver. 1.1

POWER **REC SW** **SENSOR**

Ref. No.	Part No.	Description	Remark
		< TRANSFORMER >	
⚠T901	1-431-230-11	TRANSFORMER, POWER (US)	
⚠T901	1-431-230-21	TRANSFORMER, POWER (Canadian)	
**********			
*	1-673-230-11	REC SW BOARD	
		**********	
		< CABLE HOLDER >	
* CNB601	1-565-385-11	HOLDER, CABLE 4P	
		< SWITCH >	
S301	1-762-565-11	SWITCH, SLIDE (REC/PB)	
**********			
*	1-673-231-11	SENSOR BOARD (Z550)	
		**********	
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
		< CONNECTOR >	
* CNP804	1-691-574-11	PIN, CONNECTOR (PC BOARD) 3P	
		< IC >	
IC803	8-759-459-85	IC NJL63H400A	
**********			
		MISCELLANEOUS	
		**********	
* 103	1-790-492-11	CABLE, FFC 25P	
111	1-452-899-11	MAGNET	
119	1-790-242-11	CABLE, FFC 5P	
123	1-791-472-11	WIRE, PARALLEL (FFC) (10 CORE)	
⚠251	8-848-483-05	PICK-UP, OPTICAL KSS-213C/C2N	
255	X-2626-202-1	CHASSIS ASSY (MB) (RP), MOTOR (SPINDLE) (INCLUDING M701)	
ANT1	1-501-383-21	ANTENNA, TELESCOPIC	
⚠F901	1-576-107-11	FUSE (3.15A/250V)	
HE301	1-543-876-11	HEAD (ERASE)	
HRP301	1-500-454-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	
M301	A-3320-446-A	MOTOR ASSY (CAPSTAN/REEL)	
M702	X-2625-769-1	GEAR ASSY (MB), MOTOR (SLED)	
S301	1-771-686-11	SWITCH, LEAF (TAPE PLAY)	
S302	1-762-679-11	SWITCH, LEAF (MOTOR ON/OFF)	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (CD DOOR OPEN/CLOSE)	
SP901	1-529-245-11	SPEAKER (10cm) (L-CH)	
SP902	1-529-245-11	SPEAKER (10cm) (R-CH)	
⚠T901	1-431-230-11	TRANSFORMER, POWER (US)	
⚠T901	1-431-230-21	TRANSFORMER, POWER (Canadian)	
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Ref. No.	Part No.	Description	Remark
		ACCESSORIES	
		**********	
⚠	1-696-442-21	CORD, POWER (POLARIZED) (Canadian)	
⚠	1-782-126-11	CORD, POWER (US)	
	3-027-153-11	LID, BATTERY CASE (for RMT-CZ550A)	
	3-865-709-11	MANUAL, INSTRUCTION (ENGLISH)	
	3-865-709-21	MANUAL, INSTRUCTION (FRENCH) (Canadian)	
	A-3250-909-A	REMOTE COMMANDER RMT-CZ550A//C (SET)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-649-79	SCREW +BVTP 3X14 TYPE2 N-S	
#2	7-682-548-04	SCREW +B 3X8	
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#4	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
#5	7-685-783-09	SCREW +PTT 2X6 (S)	
#6	7-621-770-87	SCREW +B 2.6X5	
#7	7-682-147-01	SCREW +P 3X6	
#8	7-621-775-25	SCREW +B 2.6X5	
#9	7-685-903-31	SCREW +PTPWH 3X10	
#10	7-685-133-19	SCREW +P 2.6X6 TYPE2	
#11	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#12	7-685-645-79	SCREW +P 3X6 TYPE2 NON-SLIT	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Printing Method for Large Sized Documents Such As Circuit Diagrams

Printing the page that exceeds A4-size two pages (or letter size) is possible by specifying the print range. (Acrobat Reader Version 4.0 or later)

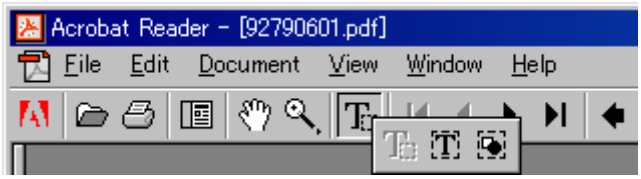
1. The enlarged print is made, if a smaller range than A4 size is specified and the A4 size is selected as a print paper.
2. Almost real sized print is made, if the range is specified, meeting the print paper size.
3. The reduced print is made, if a larger range than the print paper size is specified.

Printing by Specifying a Range

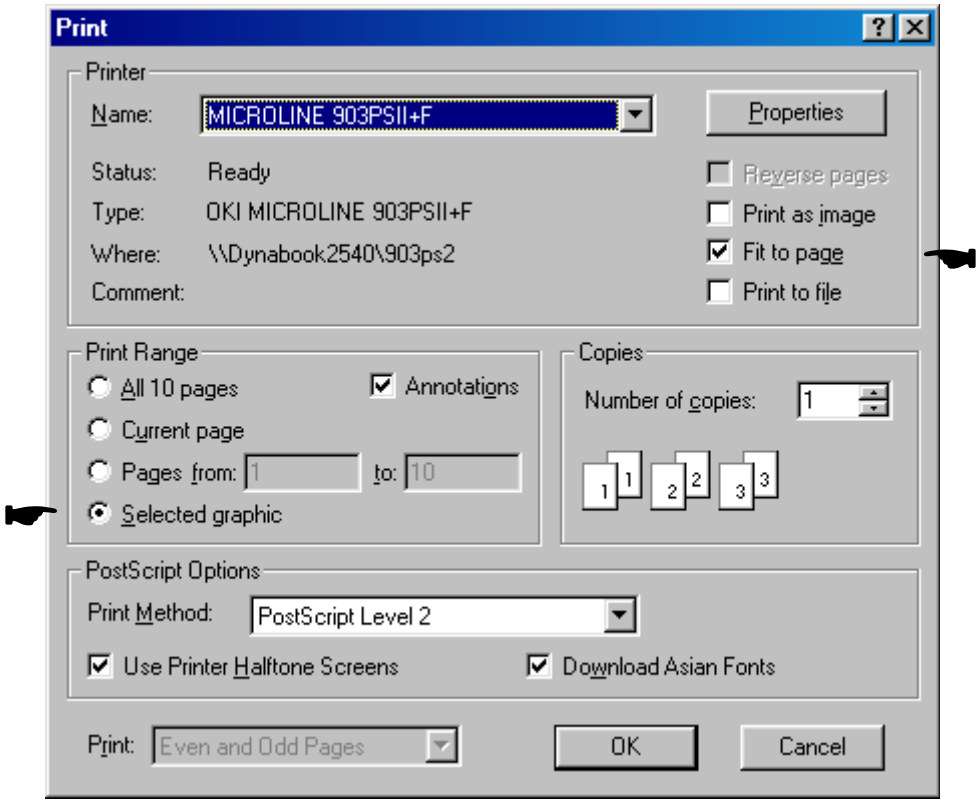
In printing out the drawings such as a schematic diagram and a printed wiring board larger than the printed paper size, they can be printed by specifying the range. (Acrobat Reader Version 4.0 or later)

1. Display the page to be printed.
2. From the File menu, select [Page Setup] and set the paper size.
3. From the Command bar, select [Graphic Select Tool].

   (Keep pressing , select)



4. Dragging the cursor, enclose the range on the page to be printed.
5. From the File menu, select [Print] and make sure that the [Selected Graphic] is already checked. Also, if [Fit to page] is checked, the selected range is enlarged or reduced (and rotated as necessary) meeting the paper size.



6. To cancel the printed range, click an arbitrary position on the screen.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2002.08	New Change of CD mechanism. (including 9-873-070-□□) (SPM-02027)
1.1	2005.09	Change of part number of power cord of US model. (SPM-05132)